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ABSTRACT

This document presents the details of 10 projects concerning the education and training of the Palestinian people that were approved for funding by the Executive Board of UNESCO in October 1990. The objectives, justification, beneficiaries, and costs of each project are listed. The projects involve the following concerns: (1) Development of primary education; (2) Teacher-training development; (3) Science and mathematics curriculum; (4) Feasibility study—curriculum development; (5) Pre-school, literacy and education for the disabled; (6) Health and agriculture manpower development; (7) Community college development; (8) Paramedical, technology and engineering development; (9) Staff development programme; and (10) Improvement of management and planning. (DB)

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PALESTINE

PRIORITY PROJECTS
FOR EDUCATIONAL DEVELOPMENT

INTRODUCTION

This document presents the details, in terms of objectives, justification, beneficiaries and costs, of the ten identified projects found in the 'Study on the Needs of the Palestinian People in the Field of Education and Training', approved by the Executive Board at its 134th session in October 1990. The ten projects are:

Projec	<u>ts</u> :	<u>Cost</u> US\$
I.	Development of primary education	3,361,275
II.	Teacher-training development	1,648,000
III.	Science and mathematics curriculum	1,501,000
IV.	Feasibility study: curriculum development	25,000
٧.	Pre-school, literacy and disabled education	280,000
VI.	Health and agriculture manpower development	416,000
VII.	Community college development	4,281,800
VIII.	Paramedical, technology and engineering development	6,927,600
IX.	Staff development programme	1,805,700
Χ.	Improvement of management and planning	291,400
		20,537,775

PROJECT I

Improvement of primary education and accelerating steps to achieve its universalization

Sub-project I.1 - Towards universal primary education Sub-project I.2 - Improvement of the quality of primary education

A. Context

Description of the sub-sector

Primary education in the West Bank and Gaza is of a six years' duration, and it is part of the compulsory education cycle composed of nine years of primary and preparatory levels. Primary education is followed by three years preparatory and three years secondary education. The latter is composed of general and vocational schools. Out of total enrolment of 548,539 at all levels, 315,985 pupils (or 57.6%) are enrolled in primary schools belonging to three agencies, the public, UNRWA and the private. 65.4% of primary education enrolment are in public schools, 29.2% are in UNRWA schools and 5.4% are in private schools. The share of UNRWA in primary enrolment is more in Gaza (53.7%) than in the West Bank (13.8%). Over a period of 20 years - 1967/68-1987/88 - the share of primary education in enrolment in all levels has decreased from 72.7% to 59.9% due to the more rapid growth in preparatory and secondary education.

Enrolment ratios at the primary level (generalized from those of UNRWA schools) for the age-group 6-11 years and grades 1-6 are as follows:

	<u>Net</u>	<u>Gross</u>
	Z.	%
Gaza	86.3	91.5
West Bank	68.1	75.6

There are 600 primary schools, out of which 428 are public, 138 UNRWA and 34 private schools. There are 8,469 primary school teachers out of whom 5,493 are in public primary schools, 2,295 in UNRWA and 681 teachers in private schools. Teacher/pupil ratio is 1/38 in primary public schools, 1/40 in UNRWA schools and 1/25 in private schools.

Curriculum in West Bank primary schools is oriented towards the Jordanian curriculum and in Gaza primary schools towards the Egyptian curriculum. Pupils in lower primary take 26 periods and in the upper primary 29 periods. The subjects taught in the upper primary are: Arabic and religion: nine periods; mathematics and science: eight periods; English language: six periods; and physical education: one period.

2. <u>Institutional framework of the sub-sector</u>

In each district of the West Bank and Gaza there is a district education office. Each education office has a director. All directors, who are local Palestinian educators, are under the control of the occupation authorities' education officers.

In each education office (directorate) there is a specialized division of school buildings. The school construction activity is initiated by the school

building division of the district education office in co-ordination with the local education committees for the allocation of land. The local district public works department is in charge of the design, construction and supervision of school building projects.

In every district education office there is a teaching aids department in charge of procuring aids in accordance with the financial allocations for aids in the budget. The department of teaching aids is in charge of the distribution of teaching aids to individual schools.

B. Project justification

1. Problems to be addressed

Primary education in the occupied territories faces several problems in the field of the achievement of universal primary education and the improvement of the quality of education at this level. First is the problem of the limited educational opportunities. About 10% in Gaza and 25% in the West Bank of the age-group 6-11 years children are still out of school mostly due to drop-out. Also, it is reported that out of the total of 379 villages, 41 do not have any school facilities. Most of these deprived villages are in Hebron and Bethlehem districts. Furthermore, not all school buildings have been constructed to be schools. In the West Bank there are 1,771 public school classrooms that are rented. These classrooms have problems in size and in the lighting, water and ventilation systems. Rented schools have no play-grounds, walls or fences. Most primary schools do not have enough furniture and what is available is deteriorating due to lack of maintenance and replacement. Most primary schools also lack basic teaching aids and materials. There are a number of primary schools that are run on a double shift basis (13 in the West Bank and 31 in Gaza public primary schools).

Moreover it is estimated that to arrive at an enrolment ratio of 99% so that universal primary education could be achieved by the year 2000, an average of 25 primary schools would be needed annually in the West Bank and Gaza (p. 31, Report on the Educational Needs of the Palestinian People).

Expected end of the project

Sub-project I.1

This sub-project aims at constructing 20 primary schools of six classrooms each in villages and rural areas that do not have proper primary education facilities in the West Bank and Gaza.

Sub-project I.2

This sub-project aims at providing basic teaching aids and learning materials to about 400 public primary schools in the West Bank and Gaza. The aid would include the provision of facilities for a small classroom library (cupboard with books).

Target groups

Sub-project I.1

A total number of 4,200 primary school age children in the deprived rural areas in the occupied territories would benefit from these schools.

Sub-project I.2

About 200,000 primary school children in the occupied territories would benefit from the teaching aids and learning materials offered.

4. Reasons for external assistance

External assistance is badly needed due to scarce financial resources available for the development of education, particularly at the primary level. The needs refer to the assessment before Intifada. Of course, needs become more urgent when considering the deteriorating conditions of primary schools during the last two years.

C. Development objective

The development objective of the project is to promote equal educational opportunities to children in the deprived areas of the West Bank and Gaza through the provision of new pupil places; and the improvement of the quality of education in all the public primary schools through the provision of teaching aids and basic learning materials.

D. Immediate objectives, outputs and activities

Sub-project I.1

1. Immediate objective

Provision of school facilities for 4,200 primary pupils in the deprived areas of the West Bank and Gaza so as to equalize educational opportunities and contribute towards the achievement of universal primary education.

1.1. Output 1

Construction of 20 primary schools each with six classrooms, one administration and staff room, one storage, and two blocks of teachers' and students' toilets.

1.1.1. Activity 1

Selection of sites.

1.1.2. Activity 2

Topographic surveys.

1.1.3. Activity 3

Design, approval of financing agency, bidding procedures and selection of contractors, approval of financing agency, contract signature and construction.

1.2. Output 2

All the 20 primary schools are provided with the necessary furniture.

1.2.1. Activity 1

List and specifications of furniture and approval of financing agency.

1..2.2. Activity 2

Bidding documents, advertising, selection of contracts, production, delivery.

Sub-project I.2

1. Immediate objective

Two hundred thousand primary school pupils will benefit from teaching aids and learning materials provided for their education through project funds.

1.1. Output 1

Every public primary school will have instructional aids and materials.

1.1.1. Activity 1

List of schools, preparation list of aids and materials, approval by financing agency, procurement of materials and their distribution to target schools.

1.1.2. Activity 2

Fellowships and short consultancies.

E. Inputs

The financing aid agency provides the following inputs:

Sub-project I.1

For the proposed 20 primary schools, the financing aid agency will cover costs for the following items:

- 1. Consultants for design and supervision.
- Construction of schools.
- Furniture of schools.
- 4. Office equipment.

Sub-project I.2

For the teaching/learning aids and materials, the financing aid agency provides the following inputs:

- 1. Short consultancy: 1 m/m.
- 2. Fellowships: 12 m/m for two supervisors.
- 3. Instructional aids and materials.
- Project formulation mission and others.

F. Budget

Sub-project I.1

Construction of 20 primary schools. Each school consists of six classrooms, one administration and staff room, one store, and toilets for teachers and pupils. Enrolment is 4,200. Class size is 35, and total number of classrooms is 120. Cost per square metre is US\$175 in base year.

Summary of cost (I.1)	US\$
(a) Base cost (1990) Civil works (area 4,200 x 2.5 m² = US\$10,500) Professional fees (6% of civil works) Equipment/furniture (13% of civil works)	1,837,500 110,250 238,875
Total base cost	2,186,625
(b) Physical contingencies 15% of base cost	327,994
(c) Price escalation 25% of base cost	546,656
Total (a) + (b) + (c)	3,061,275

Sub-project 1.2 (Budget for primary school teaching aids and materials)

	m/m	Total US\$	m/m	1991 US\$	m/m	1992 US\$	1993 m/m	3 US\$	
10. Project personnel 11.51. Short consultancy	- 	7,000	,	7,000		ı			
33.01. Fellowships	. 1.	24,000		1	15	24,000			
40. Equipment 42.01.Non-expendable		261,000		ı		100,000	19	161,000	
52. Reporting cost	2	3,000		1,000		2,000	91	3,000	
Summary of costs (I.2)				÷	in US\$				
Short consultancy 1 m/m				7.	7.000				
Training: two fellowships: 12 m/m				24,	24,000				
Teaching/learning materials				261,000	000				
Reporting costs				θ,	3,000				
Sundries (includes one short mission)	(uc			υ,	5,000				
Total				300,000	000				
					1			. ".	r
0.1									

Cost estimates Project I: Primary education (Sub-project I.1 and Sub-project I.2)

	Category	US\$	US\$	7.
I.	Construction Sub-project I.1 Sub-project I.2 Sub-total	2,726,850	2,726,850	81.2
II.	Equipment, furniture, materials Sub-project I.1 Sub-project I.2 Sub-total	334,425 261,000	595,425	17.7
III.	Technical assistance Consultancies Sub-project I.1 Sub-project I.2 Fellowships	7,000		
	Sub-project I.1 Sub-project I.2 Sub-total	24,000	31,000	0.9
IV.	Miscellaneous Sub-project I.1 Sub-project I.2 Sub-total	8,000	8,000	0.2
	Total Sub-project I.1 Sub-project I.2 Total	3,061,175 300,000	3,361,275	

PROJECT II

Development of pre-service and in-service training of teachers at the compulsory and general secondary levels

Sub-project II.1 - Development of pre-service teacher-training facilities in community colleges and universities

Sub-project II.2 - Five-year in-service teacher-training programme in primary, preparatory and secondary levels

Sub-project II.3 - Establishing a national in-service teacher-training institutional set-up

A. Context

1. Description of the sub-sector

The number of teachers in the West Bank and Gaza is 16,428 according to data of 1987/88. About 69% of these are teachers employed in government (public) primary, preparatory and secondary schools, 22% in UNRWA primary and preparatory schools, and 9% in private schools of all levels. Level wise, 52% or the total number of teachers are employed in primary schools, 28% in preparatory schools and 20% in secondary schools. The following table provides data by level and agency concerning teachers in 1987/88:

	Government	<u>UNRWA</u>	<u>Private</u>	<u>Total</u>
Primary Preparatory Secondary	5,493 2,959 2,871	2,295 1,291 -	681 363 475	8,469 4,613 3,346
Total	11,323	3,586	1,519	16,428

Teachers at the primary level should have a minimum of a secondary education certificate plus a two-year post-secondary professional training at a community college. Qualification requirements concerning teachers of preparatory schools have undergone some changes. Previously requirements were like those of the primary level. Now teachers of the preparatory level are treated more like the secondary school teachers. They should have a university degree in addition to a teaching diploma (or an equivalent in-service training arrangement).

Primary teachers are trained in community colleges. Candidates with secondary education are offered a two-year training course. Fourteen out of the 17 community colleges of the West Bank and Gaza offer teacher-training courses. Total enrolment in the teacher-training sections was 3,033 (in 1985/86), with 60% of enrolment composed of girls. The five government colleges train 50% of the total, the UNRWA colleges 21% and the private colleges 29%. The following table shows the distribution of enrolment in community colleges teachers specializations by agency and sex:

<u>Agency</u>	<u>M</u>	<u>F</u>	<u>Total</u>
Government	591	888	1,479
Philanthropic	141	3 2 5	466
UNRWA	297	326	623
Private	158	307	465
Total	1,187	1.846	3.033

Preparatory and secondary teacher training is undertaken at the university level. Secondary school teachers should have a subject or related subject specialization plus a pedagogical training course. Of the six universities in the occupied territories, three of them, Gaza, Bethlehem and Al-Najah/Nablus, offer education courses. (It is reported that two more universities, Hebron and Jerusalem, have started to provide education courses.)

Teacher in-service training has been one of the major fields in which the UNRWA school system has been very active before and after occupation. In fact UNRWA is considered as the pioneer in the field of the upgrading of teachers' qualifications and competence. The occupation authorities' in-service training activities have been scarce and concentrated on refresher courses in a few selected areas such as the teaching of the Hebrew language.

2. Institutional framework of the sub-sector

All universities are privately run educational institutions. Thus secondary as well as preparatory teacher training are organized in the privately run universities. Primary teacher training takes place in community colleges belonging to the private and public sectors as well as to UNRWA. In-service teacher training is organized by the districts to be held either on individual district level or combining several districts.

B. Project justification

1. Problems to be addressed

The quality of education in the occupied territories in primary, preparatory and secondary schools has been deteriorating. One of the main reasons for this is the absence of upgrading in-service teacher training courses in the public and private schools.

According to the latest UNRWA data concerning the professional qualifications of teachers (1988/89), 763 out of 775 teachers in the West Bank and 1,517 out of 1,549 in Gaza are professionally qualified to teach at the primary level. The same situation ar lies to UNRWA preparatory school teachers in Gaza and the West Bank. In general a qualified preparatory school teacher has followed through in-service teacher training arrangements either a three-year post secondary teacher training course or a phased four-year teacher training course. (There are various formulas and arrangements through which UNRWA offers in-service training opportunities for its teachers.)

Such upgrading and certification teacher training arrangements are not available at all for the public and private school teachers. It is reported that for the West Bank (1985/86), 4.8% of the public school teachers of all levels only had a secondary education background, 67% a two-year post secondary diploma, and 28.2% a B.A. For Gaza, the rates (1980/81) are 30.4% of the teachers with secondary education only, 40% with a two-year diploma and 29% with a B.A.

It is not only the problem of the absence of upgrading and certification in-service training arrangements for the teachers of the public and private schools, but also the inadequacy of the present short refresher in-service teacher training arrangements. One of the reasons of this is the absence of required skills and competence as well as the required institutional set-up at the district and the national levels for organizing in-service teacher training programmes.

2. Expected end of the project

The problem of the inadequacy of the professional qualifications of teachers in the West Bank and Gaza is more severe and pronounced in the public and private schools than in those of UNRWA. Therefore the present project, with its three sub-projects, is limited to public and private school teachers. Based on the data of 1987/88 the following is the number of teachers in the public and private schools in the West Bank and Gaza:

Level	<u>Number</u>
Primary Preparatory Secondary	6,174 3,322 3,346
Total	12,842

In terms of professional qualifications of the present stock of public and private school teachers, the following is a rough estimate:

<u>Level</u>	Sec. certif.	Dipl.two yrs	<u>B.A.</u>	<u>Total</u>
Primary Preparatory Secondary	1,310	4,864 3,008 -	- 314 3,346	6,174 3,322 3,346
Total	1,310	7,872	3,360	12,842

Based on current professional qualifications for each level, it is evident that:

- 1,310 teachers of the primary level with a general secondary education background need a two-year in-service training course so as to be diploma holders;
- 3,008 teachers of the preparatory level with the two-year diploma are in need of at least a one-year in-service training course in more than one subject;
- 3,346 teachers of the secondary level with a B.A. are in need of a one-year education diploma in-service training course.
- It is planned that community colleges and universities will be in charge to undertake the above-mentioned tasks of upgrading and certifying underqualified teachers.

Sub-project II.1

This sub-project aims at the improvement of the teacher-training facilities in community colleges and universities currently engaged in pre-service teacher training so that they will be able to undertake the above-mentioned tasks.

Sub-project II.2

This sub-project aims at the implementation of a five-year plan of the in-service training of teachers who need upgrading in accordance with the immediate objectives stated in (D) below.

Sub-project II.3

This sub-project aims at the establishment of an institutional infrastructure at the district and national level so that the above in-service training targets could be achieved <u>vis-à-vis</u> planning, implementation and follow-up.

3. Target groups

- 1. Out of the 1,310 public primary school teachers who are in need of upgrading, only 700 public and private school teachers are planned as a target group (the rest are either about to retire, or could be left for a second five-year in-service teacher training plan).
- 2. Out of the 3,008 preparatory school teachers who are in need of upgrading, only 2,000 are planned as a target group (the rest are either about to retire, or could be left for a second five-year in-service teacher training plan).
- 3. Out of the 3,346 secondary school teachers who are in need of upgrading only 2,000 are planned as a target group (the rest are either about to retire or could be left for a second five-year in-service teacher training plan).

C. Development objective

The project aims at providing the Palestinian school population with an education which will contribute towards the achievement of the full development of the child and of his society through the improvement of the professional qualifications of teachers.

D. Immediate objectives, outputs and activities

Sub-project II.1

1. Immediate objective

Improvement of the teacher-training facilities in the community colleges and universities that have teacher-training programmes to enable them (a) to expand their pre-service teacher-training programmes, and (b) to participate in the implementation of the in-service teacher-training plan proposed in Sub-project II.2.

1.1. Output 1

Each community college and department of education expands and improves its teacher-training facilities.

1.1.1. Activity 1

Provision of equipment: preparing lists, specification, bidding documents advertisement, contractors, delivery.

1.1.2. Activity 2

Provision of textbooks: same as in 1.1.2.

1.1.3. Activity 3

Short consultancies.

Sub-project II.2

Immediate objective

Improvement of the teaching competence and skills of (a) 700 primary school teachers, (b) 2,000 preparatory school teachers, and (c) 2,000 secondary school teachers through in-service training programmes.

1.1. Output 1

Seven hundred primary school teachers finish a two-year in-service training programme through attending evening courses in the community colleges found in their districts.

1.1.1. Activity 1

District education officers prepare plans: and the training institution prepares programmes and trains its own trainers.

1.1.2. Activity 2

Each of the 700 teachers attends the courses in accordance with the general plans.

1.2. Output 2

Two thousand preparatory school teachers finish a special training programme in which each teacher gets training in the teaching of two subject areas of the preparatory syllabus of a duration of one year.

1.2.1. Activity 1

District education officers prepare plans and the training institutions prepare training programmes and undertake to train their own trainers.

1.2.2. Activity 2

Each of the 2,000 teachers attends the training courses in accordance with the general plans.

1.3. Output 3

Two thousand secondary school teachers finish a one-year educational professional diploma.

1.3.1. Activity 1

District education officers prepare plans and the training institutions prepare training programmes and undertake to train their own trainers.

1.3.2. Activity 2

Each of the 2,000 teachers attends the training courses in accordance with the general plans.

Sub-project II.3

1. Immediate objective

Improvement of the skills and competence of district education officers in the planning, implementation and follow-up of in-service training of teachers' programmes.

1.1. Output 1

Preparation, implementation and follow-up of plans for the in-service training of teachers in each district.

1.1.1. Activity 1

Training (study tours and short courses abroad) of nine district education officers from the West Bank and Gaza.

1.1.2. Activity 2

Provision of office equipment and materials.

E. Inputs

The financing aid agency provides the following inputs:

Sub-project II.1

For 13 community colleges and three universities with faculties of education:

- 1. Teaching equipment.
- 2. Learning textbooks and references.
- Short consultancies.

Sub-project II.2

1. Tuition fees will be provided for:

700 primary school teachers: each two years;

- 2,000 preparatory school teachers for upgrading subject-matter training to be finished in one year;
- 2,000 secondary school teachers for acquiring a professional educational diploma one-year course.
- Short consultancies.
- 3. Training of college and university instructors in workshops.

Sub-project II.3

- 1. Fellowships.
- 2. Office equipment.

Sub-projects II.1, II.2 and II.3 (Budget for in-service training of teachers)

F. Budget

		Total		1991		1992		1993	1994	1995
	m/m	\$ \$0	m/m	SSD u	m/m	US\$	m/m -:	\$50	. m/m	SSO W/W
Sub-project II.1					·					
	 4	28,000	 	14,000		1	2	14,000		i
<pre>! 40. Equipment ! 42.01. Non-expendable eq.</pre>		192,000		96,000	<i>-</i> .	96,000		ı		
42.02. Textbooks		80,000		16,000		16,000		16,000	16,000	16,000
: 50. Miscellaneous										
! 52. Reporting		10,000	<u></u> .	7,000		ı		ι		3,000
Sub-project II.1 Total	4	314,000	7	134,000		112,000	2	30,000	7,000	21,000
	<u></u> .				• ·					
Sub-project II.2	.								·•	
: 10. 11.51. Short consultancies		35,000	. 2	14,000		7,000		7,000	1,000 l	ı
! 30. Training										
! 32.01. Training of trainers		50,000		50,000		ı		1	·	ı
! 33.01. 700 prim.teachers		350,000		70,000		70,000		70,600	1000,000	10,000
! 33.02. 2000 prepa. teachers		200,000		40,000		40,000		40,000	1 40,000	40,000
! 33.03. 2000 secon. teachers		200,000		100,000		100,000		100,000	100,000	100,000
! 50. Miscellaneous										
! 52. Reporting	 .	000,01	 .	7,000	<u></u> .	ı	 -	ı	٠	3,000
Sub-project II 2 Total	_	1 149 000	. _	282 000	. _	217 000		217,000	218,000	215,000
		222		201						
! Sub-project II.3			-•							
! 30. Training	 .		•							
: 31.01. Fellowships	54	108,000	124	48,000	- 18	36,000	- 15	24,000	'	ı
! 40. Equipment										
: 42.01. Non-expendable		70,000		70,000		ı		ł	ı`	:
: 50. Miscellaneous										
! 52. Reporting		3,000		1		ı		ı	'	3,000
: 53. Sundries		4,000	_	1,000		1		1	1,000	2,000
! Sub-project II.3 Total		185,000		119,000		36,000	_	24,000	1,000	2,000

Cost estimates Project II: Teacher training (Sub-project II.1, Sub-project II.2 and Sub-project II.3)

	Category	US\$	US\$	%
Ι.	Construction Sub-project II.1 Sub-project II.2 Sub-project II.3 Sub-total			
II.	Equipment, furniture, Sub-project II.1 Sub-project II.2 Sub-project II.3 Sub-total	materials 272,000 70,000	342,000	20.8
III.	Technical assistance Consultancies Sub-project II.1 Sub-project II.2 Sub-project II.3 Fellowships	28,000 35,000		
	Sub-project II.1 Sub-project II.2 Sub-project II.3 Sub-total	1,100,000	1,271,000	77.1
IV.	Miscellaneous Sub-project II.l Sub-project II.2 Sub-project II.3 Sub-total	14,000 14,000 7,000	35,000	2.1
	Total Sub-project II.1 Sub-project II.2 Sub-project II.3 Total	314,000 1,149,000 185,000	1,648,000	100.0

PROJECT III

<u>Development of science and</u> mathematics curriculum

Sub-project III.1 - Revision of the curriculum of science and mathematics
Sub-project III.2 - Improvement and provision of equipment and materials of
science laboratories

A. Context

1. Description of the sub-sector

The curriculum applied and followed in the occupied territories is basically the same as the one applied in Jordan as far as the West Bank schools are concerned and the one applied in Egypt as far as the Gaza Strip schools are concerned. However, it should be pointed out that after the Israeli occupation, almost all textbooks used in the West Bank and Gaza (inherited from the Jordanian and Egyptian education systems) have been subjected to a process of censorship that resulted in modifications, changes and alterations of content. The degree of content alterations and omissions depends to a great extent on the subject-matter of the textbooks. The content of social science, language and religious education textbooks have been changed to suit the occupation authorities' educational objectives.

Science and mathematics textbooks are supposed to be available for all pupils, free of charge, at the primary and preparatory schools. At the secondary level students have to pay for their textbooks including those of science and mathematics. Textbooks are printed annually whenever the existing stock is exhausted.

Science is taught as an integrated subject for all the students at the primary, preparatory and first secondary (grade 10). At the second and third secondary classes (grades 11 and 12), three science disciplines are taught as separate subjects, namely biology: two periods; physics: four periods; and chemistry: three periods.

Science and mathematics subjects are taught at the lower primary grades by teachers who teach all subjects for the same learning group. At the upper primary grades science and mathematics subjects are taught by related subject specialist teachers. The number of teachers at the primary level in the occupied territories is 8,469 of whom 5,493 are employed in government schools. By definition primary level teachers are supposed to be professionally trained at the community colleges which are two-year post-secondary educational institutions. Mathematics and science teachers at the preparatory level should be now graduates of community colleges in addition to a one or two years' further specialization in science and mathematics. Preparatory school teachers could be university graduates. At present, there are 4,613 preparatory school teachers of whom 2,959 are employed in government schools. It is estimated that out of the 4,613 teachers, 1,291 are science and mathematics teachers.

At the secondary level science (biology, physics and chemistry) and mathematics teachers should be university graduates with specialization in their respective subjects in addition to some professional training in the teaching profession. At present there are 3,346 secondary-level teachers of

whom 2,871 are employed in the government schools. It is estimated that 1,100 teachers teach science and mathematics.

The amount of time allotted for the teaching of science and mathematics depends on the grade, the level and type of education offered (type refers to literary and scientific secondary schools).

The number of periods allotted for mathematics and science is as follows:

at the primary level, pupils get four periods in mathematics in each of the six grades, and three periods in science in the lower grades and four periods in science in the upper primary grades (total weekly periods: 24 and 29):

at the preparatory level, all pupils get four weekly periods of mathematics and five periods of science (total weekly periods: 32);

at the secondary level at grade 10 students get four periods of mathematics and six periods of science (total weekly periods: 31). In grades 11 and 12 science stream students get five periods of mathematics and nine periods of science (two biology, four physics and three chemistry), or what is equivalent to 45% of the total weekly periods. In grades 11 and 12 literary stream students get three periods of mathematics and three periods of general science, or what is equivalent to 19.3% of the total weekly timetable.

2. Institutional framework of the sub-sector

There are internal arrangements by which the nine district education offices in the West Bank and Gaza receive their quotas of textbooks which they in turn distribute to primary and preparatory schools. Secondary level textbooks are made available in the market for students for sale. All matters related to textbooks are refered to the occupation education officer for final decision-making. At present there is no arrangement in the occupied territories for general curriculum revision and development. In each district education office there are inspectors who supervise the teaching of Arabic, English, mathematics, science, physical education, arts, home economics and Islamic religion.

B. Project justification

Problems to be addressed

The teaching of science and mathematics (as well as other subjects) is facing serious problems in the occupied territories. Without offering solutions and remedies to these problems, the teaching of science and mathematics becomes gradually of no value. Giving priority to science and mathematics is justified by the fact that the future development and survival of the Palestinian people depends, to a large extent, on how they are prepared to live in an age where modern technology and science have a decisive role to play.

The availability of well-equipped science laboratories (general for the preparatory schools and specialized for the scientific secondary schools) is a necessary condition for successful science teaching. There should also be suitable physical facilities, enough science equipment and consumable laboratory materials. Moreover, there should be a well-trained science teacher who should have enough training background in the use of laboratories for teaching purposes. Also, the availability of laboratories and teachers is of

no use if the curriculum and the textbooks are out of date. The development of science and technology in the world is taking place in a highly accelerated manner so that the necessity of the continuous revision of the science curriculum becomes obvious.

The actual situation of science laboratories in the occupied territories is not at all satisfactory. The discussion is here limited to government schools in the West Bank and Gaza Strip. There are 288 government preparatory schools (total 414) and 259 government secondary schools, making a total of 547 schools. It is estimated that 35.4% of the total government preparatory and secondary schools do not have science laboratory facilities at all. If the number of schools with laboratories lacking minimum equipment is added, then the ratio of preparatory and secondary schools that do not have proper laboratory facilities becomes 53%, or 273 schools (or 144 preparatory and 130 secondary schools). It should be added that the remaining schools with laboratories need additional equipment and full supply of chemicals and other consumable materials.

It should be added that the occupation authorities have confiscated most laboratory chemicals from all schools immediately after occupation under the pretext that these chemicals could be used in what is called subversive activities. These confiscated chemicals have never been replaced. Consequently science laboratories became practically of no educational use because of the absence of the necessary materials and chemicals; with the passage of time, the science laboratories in preparatory and secondary schools have been gradually reduced in number (quantity) and have not been able to fulfil educational objectives (quality).

The net result of all this educational policy in the West Bank and Gaza is that science teaching has become a purely theoretical educational activity with no practical laboratory work at all. The teaching of biology, physics and chemistry has been reduced to the theoretical teaching of outdated scientific knowledge. To this degradation of the status of the teaching of science and mathematics, one should add the continuous decline in the performance of teachers due to insufficient academic and professional/pedagogical pre-service training programmes in science and mathematics.

Expected end of the project

Sub-project III.1

This sub-project aims at the revision, updating and development of the science and mathematics curriculum at the primary, preparatory and general secondary levels. The task would cover the updating of facts, information, basic concepts as well as the development of teachers' guides covering methods of teaching. Emphasis would be laid down on the laboratory practical and application aspects of the teaching of science.

Sub-project III.2

This sub-project aims to provide laboratory equipment and necessary materials and chemicals for 20 preparatory schools, each should have not less than six preparatory classes. Other neighbourhood schools could use these laboratories. (There are 288 government preparatory schools: 30% or 87 are without laboratories. The proposed 20 laboratories will serve all the remaining 58 secondary schools that do not have laboratories.)

3. Target groups

Sub-project III.1

All pupils of the primary schools (315,985), of the preparatory schools (116,394) and of the secondary shools (60,414) are the beneficiaries from this sub-project of curriculum development.

Sub-project III.2

Pupils of all the preparatory and secondary schools that are now without science laboratories, or 165 schools, with an enrolment of about 60,000 students will benefit from this sub-project which provides laboratory equipment.

C. <u>Development objective</u>

The development objective of the project is to improve the education offered to the Palestinian students \underline{vis} — \underline{a} —vis the improvement of the teaching of science and mathematics, which will make them better prepared to meet the social and economic development needs of their society.

D. Immediate objectives, outputs and activities

Sub-project III.1

1. Immediate objective

Improvement and development of the teaching of mathematics and science through the revision and updacing of the existing curriculum in these two subject-matter areas. The improvement should be in content and method of teaching.

1.1. Output 1

A well-developed mathematics and science curriculum for the primary, preparatory and general secondary levels and the accompanying syllabi and teachers' guides would be ready.

1.1.1. Activity 1

Forming a central curriculum revision and development committee composed of science and mathematics specialists from district education offices, experienced teachers and university resource persons.

1.1.2. Activity 2

The committee reviews the curriculum and prepares the syllabus and the teachers' guides.

1.2. Output 2

Mathematics and science texbooks containing all the new modifications to be made available for the learners.

1.2.1. Activity 1

Preparing draft textbooks in science and mathematics, for trial purposes in a number of schools.

1.2.2. Activity 2

Revision of the proposed curriculum on the basis of feedback.

1.2.3. Activity 3

Printing of texbooks in science and mathematics on the basis of the new curriculum.

Sub-project III.2

1. <u>Immediate objective</u>

Making the teaching of science a meaningful and effective learning experience for the students by the provision of practical learning experiences in well-equipped laboratories.

1.1. Output 1

Providing 20 preparatory schools (each to serve one or two more schools with no laboratories) with general science laboratory equipment, and 20 secondary schools with science streams with semi-specialized laboratories (to serve for chemistry and biology or for physics alone).

1.1.1. Activity 1

Selection of preparatory and secondary schools to be provided with laboratories.

1.1.2. Activity 2

Preparation of equipment list, teacher documents, procurement and distribution.

1.2. Output 2

All teachers of science of the preparatory and secondary schools to be provided by laboratory equipment will be trained on how to use laboratories for science teaching purposes and how to take care of the equipment.

1.2.1. Activity 1

Holding training courses and workshops for the science teachers on the use and maintenance of laboratory equipment.

1.2.2. Activity 2

Sending four science teachers on study tours in countries with developed science teaching.

E. Inputs

Sub-project III.1

- 1. Short consultancies in teaching of science and mathematics.
- 2. Honoraries and other costs for the national science and mathematics curriculum committee.

- 3. Costs of printing trial materials.
- 4. Costs of field trial of curriculum materials.
- 5. Two regional tours.

Sub-project III.2

- 1. Short consultancies.
- 2. Laboratory equipment, materials and chemicals.
- 3. Costs to cover laboratory training workshops.
- 4. Four regional study tours.

Sub-projects III.1 and III.2

F. Budget

		otal		1991		1992	1993		1994		1995
	m/m	\$ SN	m/m -	NS\$	ш/ш	NS\$. m/m US	m/m ; ₹SN	102	m/m	SN N
Sub-project III.l								·			
10. Project personnel					.						
11.51. Short consultancies	; 2	14,000		7,000		ı	ı 		7,000		
17.01. Members Cur.Committee		25,000		2,000		2,000	1 5,000		5,000		2,000
30. Training											
32.Study tours (2 persons)	: 2	20,000	; 2	20,000		1	1	~• ,	ı		
50. Miscellaneous			- .		.						
52. Reporting		10,000		7,000		ı	ı 	: 	1		3,000
53. Sundries		14,000		-	_	-			7,000	_	7,000
Sub-project III.1 Total	4	83,000	3	39,000	_	5,000	2,000	1 10	19,000		15,000
Sub-project III.2											
10. Project personnel			- .								
11.51. Short consultancies	: 2	14,000		7,000		1	1		ı	- 	7,000
30. Training											
32.Study tours	4	40,000		ı		ı			ı		ı
33.Training workshops		30,000		10,000		10,000	10,000	-:			ı
40. Equipment											
41. Expendable		20,000		1		ı	· 		20,000		,
42. Non-exp.iidable	_•			ı		1	1		1		
42.01. Preparatory lab. eq.											
25,000 per lab		500,000				ı	1		200,000		ı
42.02. Secondary lab. equip.											
40,000 per lab		800,000		,		ı	ı 		800,000	- .	1
50. Miscellaneous											
52. Reporting		10,000		7,000		ı	· 		1		3,000
53. Sundries		4,000	_	1,000	_			_	000		2,000
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		410 000	u	6E 000	_	10 000	10.000		1 321 000	_	12,000

Cost estimates Project III: Teaching of science and mathematics (Sub-project III.1 and Sub-project III.2)

•	Category	US\$	US\$	%
I.	Construction Sub-project III.1 Sub-project III.2 Sub-total			
II.	Equipment, furniture, materials Sub-project III.1 Sub-project III.2 Sub-total	1,320,000	1,320,000	
III.	Technical assistance Consultancies Sub-project III.1 Sub-project III.2 Fellowships	39,000 1 4, 000		
	Sub-project III.1 Sub-project III.2 Sub-total	20,000 70,000	143,000	
IV.	Miscellaneous Sub-project III.l Sub-project III.2 Sub-total	24,000 14,000	38,000	
	Total Sub-project III.1 Sub-project III.2 Total	83,000 1,418,000	1,501,000	

PROJECT IV

Feasibility study for curriculum development

A. Context

1. Description of the sub-sector

The Palestinians as a people with their own distinct cultural identity have their homeland in what is known geographically as Palestine. They have been living continuously and without interruption in Palestine since the pre-biblical times up to the present. When the British Mandate started in 1918 Palestinian Arabs made up 93.75% of the total population in Palestine estimated to be at that time 640,000, and their number became 1,400,000 in 1947.

After 1948, and the establishment of Israel on part of the Palestinian homeland, part of the Palestinians were forced to leave their ancestral homes and be in Diaspora. More Palestinians became refugees after the 1967 war. The Palestinian population in 1987 was estimated to be 5,431,400. It is estimated that in the year 2000, there would be 7,120,000 Palestinians whose school-age children should get an education which expresses and realizes their national aspirations and revives and safeguards their national cultural identity.

There are at present 2,217,000 Palestinians living under occupation in their homeland, Palestine, and the rest are living in Diaspora as the following table demonstrates:

	NO.	7.
1. Occupied Palestine of 1948 2. West Bank and Gaza Strip 3. Jordan, Syria and Lebanon 4. Other Arab States 5. The rest of the world	662,631 1,555,069 2,162,700 769,000 282,000	12.2 28.6 39.8 14.2 5.2
Total	5,431,400	100.0

It is not known how many of the total Palestinian population are students. However, based on the basic assumption that the Palestinians value education more than anything in life, it could be said that there are about 1.6 million Palestinians who attend educational institutions starting from kindergarten and primary education up to university. It could be generalized that Palestinian students, wherever they are found, receive the education of the authorities (and governments) of the country in which they live. In the occupied Palestine of 1948 (the State of Israel) Palestinian children were educated according to Israeli curriculum. Palestinian children in the occupied territories of the West Bank and Gaza learn in accordance with the curriculum of Jordan and Egypt (altered by the occupation authorities). In the Arab countries, including those with UNRWA schools, Palestinian children learn according to host country curriculum. The same thing could be said about Palestinian children living in all other countries in the world.

2. Institutional framework for the sub-sector

It is obvious from the preceding section that at present there is no institutional framework for the development of a Palestinian curriculum because nowhere is there a curriculum specifically designed and developed for the Palestinian people. Yet it should be mentioned that there are highly qualified Palestinian educationists who are professionally competent in curriculum development. They have been engaged in the development of curriculum in the host countries. However it should be mentioned that in the occupied territories of the West Bank and Gaza there has been no activity in curriculum development. The occupation authorities' main concern in this field has been to exercise censorship on curriculum rather than encouraging educational development.

B. Project justification

1. Problems to be addressed

At present Palestinian students are being educated in accordance with various types of curricula of host countries or occupied territories. As a consequence of this situation, the Palestinian children are not taught in accordance with their national culture and tradition and are not educated to realize and serve in the future their national development objectives. The present situation, vis=a-vis the existence of several curricula for the education of the Palestinian child, would in the long run lead not only to cultural alienation and disintegration but also to a gradual suppression of the Palestinian identity.

2. Expected end of the project

The main objective of the project is to undertake a feasibility study on the development of a curriculum for the Palestinian education. The curriculum, which would shape, develop and prepare the young for the future, should be based on the basic principles concerning Palestinian national character and identity as embodied in 'the Declaration of Independence of the State of Palestine'.

The feasibility study should consider curriculum as covering:

all levels of education from the pre-school to community college education (and co-ordination of activities with the Council of Higher Education);

formal and non-formal education systems;

general and vocational education.

The feasibility study should emphasize that the proposed curriculum aims at:

preservation of the Palestinian national character and cultural identity;

meeting social and economic development needs of the Palestinian society <u>vis-à-vis</u> meeting manpower requirements;

giving prominence to the teaching of science, technology and communication skills.

The feasibility study should take into consideration the above basic principles in recommending a centre in which all activities of curriculum development will take place. Thus the study should specify: (1) the objectives of the centre; (2) the justifications for the centre; (3) the main units to be established and the activities to be undertaken; (4) the professional (locally recruited), administrative and servicing personnel needed; (5) the equipment, furniture and materials needed; (6) technical assistance to cover consultancies and experts; (7) the physical facilities, rented or constructed; and (8) the costing of the project. Various options for the location of the centre should be considered and thus various cost estimates based on each option.

C. Development objective

The main development objective of this project is the preservation of the Palestinian national character and cultural identity as well as the full development of the Palestinian as an individual and meeting the social and economic development needs of the State of Palestine.

D. Immediate objectives, outputs and activities

Immediate objective

The feasibility study for curriculum development will help decision—makers to establish a curriculum development centre based on findings of the report and various cost options presented.

1.1. Output 1

The feasibility study will be made available for responsible education authorities (PLO) for decision-making.

1.1.1. Activity 1

A team of experts composed of two members, one a curriculum specialist and the other an education planning specialist, is formed.

1.1.2. Activity 2

Terms of reference for the team are prepared.

1.1.3. Activity 3

The team undertakes field trips, fact finding missions to Jordan, Syria and if possible to the occupied territories.

1.1.4. Activity 4

The team spends one week either in Amman, UNEDBAS, or in Paris, UNESCO Headquarters for report writing.

E. Inputs

- 1. Honoraria for the members of the team.
- 2. Travel and per diem expenses.
- Report production expenses.

F. <u>Budget</u>

	US\$
Honoraria (2) three weeks each Travel and per diem Report production Miscellaneous	10,000 10,000 1,000 4,000
Total	25,000

Cost estimates
Project IV: Feasibility study for curriculum development

	Category	US\$	US\$	7.
I.	Construction Equipment, furniture, materials	-		
III.	Technical assistance Consultancies (honoraria (2) three weeks each) Fellowships	national	23,000	92.0
IV.	Miscellaneous (reporting)		2,000	8.0
	Total		25,000	100.0

PROJECT V

Development of pre-school, non-formal, disabled and retarded education

Sub-project V.1 - Development of pre-school education

Sub-project V.2 - Development of non-formal education for women

Sub-project V.3 - Support for centres of education and rehabilitation of the retarded and the disabled

A. Context

1. Description of the sub-sector

Pre-school education

Most children going to pre-school institutions are enrolled in private kindergarten. About 10% of enrolled pre-school children are accommodated mostly in Gaza in UNRWA controlled kindergartens. Pre-school education has been playing an important role in the building up of the personality of the Palestinian child. In 1987/88 pre-school enrolment was 29,418, the number of kindergartens 213, classes 953, and teachers 1,044. About 23% of total enrolment was in the Gaza Strip.

Non-formal education for women

Palestinian voluntary and women associations have established a substitute system of non-formal adult education to replace the system that was closed down by the Israeli occupation authorities. A committee for literacy and adult education was formed. Literacy rate among women aged 15-45 years is 20% (47,329 out of 234,800) in the West Bank. Total illiteracy, among men and women, for this age-group is 9.3% (55,154 out of 596,200). So far 50,670 adults have benefited from literacy centres in the West Bank and Gaza. The women association owned 129 adult literacy centres in 1986. The number of participating adults is 2,451.

The retarded and disabled

The total number of handicapped and retarded persons taken care of is 2,248 of known cases out of 16,869. The expected total number of cases is 29,700. These are estimates for 1986/87 and it should be expected that the number of the physically handicapped and mentally retarded has substantially increased since Intifada in December 1987. The number of the physically handicapped constitute 32.7% of the total, the blind 9.5%, the deaf and mute 28% and the mentally retarded 1.6%. There are five institutions taking care of the deaf, seven institutions for the blind, 12 institutions for the mentally retarded and six institutions for the physically handicapped. There are also seven institutions taking care of the persons who have multiple handicaps. The total number of institutions is 37. The national private sector runs 27 institutions, the foreign voluntary sector runs nine institutions and the public sector (the occupation authorities) runs only one institution. In 1986/87, there were 472 persons employed in these institutions of whom 243 were members of the teaching and technical staff.

2. Institutional framework of the sub-sector

The national private associations and foundations play the major role in all the three sub-sectors in which the three sub-projects have been

identified, namely (a) pre-school education, (b) adult education and literacy, and (c) the education and the rehabilitation of the handicapped and the retarded. Therefore, the institutional framework for the three proposed sub-projects would be the various private community associations which might be represented by a federation or an association. The role of the public sector (the occupation authorities) is negligible in this domain.

B. Project justification

1. Problems to be addressed

Pre-school education

Most of the teachers of the kindergartens are not qualified to teach at the pre-school education level.

So far no curriculum has been specially designed for pre-school education purposes.

All pre-school institutions lack the simplest kind of equipment and teaching aids and materials.

All physical facilities are rented and thus most of them are not suitable for educational purposes. They lack playgrounds.

There is a high rate of drop-out of enrolled children due to frequent closing down of institutions.

The financial situation of the kindergartens is precarious because of the fact that most children cannot pay full fees.

Financial difficulties lead to low salaries and hence only unqualified teachers could be employed.

There is a high demand for pre-school education but there is a shortage of places.

Adult education and literacy

Since it is no more one of the functions of the Education Department, the private efforts in adult education and literacy are handicapped by the scarcity of financial resources.

Teachers of adult education lack initial and in-service training.

Adult education materials currently used are mostly primary education texts designed for the education of children, thus there is the need to develop adult education learning materials.

Literacy programmes concentrate mainly on reading and writing. Vocational training activities are rarely found in literacy centres.

The number of literacy centres is limited compared with the increasing demand for literacy programmes.

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The handicapped and the retarded

Lack of expertise

Institutions in charge of the education and the rehabilitation of the retarded and the handicapped face the problem of the shortage of well trained technical personnel in all fields. There is the need for in-service training and the introduction of related specialization at the university level.

Lack of facilities and equipment

There is the problem of the deteriorating conditions of physical facilities and equipment. Thus there is the need for maintenance work, new equipment and the improvement and expansion of facilities.

Lack of community understanding

Community understanding is a necessary condition for the success of any programme in this field. But this community understanding is lacking nowadays.

Expected end of the project

Sub-project V.1

This sub-project dealing with pre-school education aims at:

- (a) development of pre-school curriculum including a teacher's guide;
- (b) provision of equipment, furniture and teaching aids to educational institutions that are in need;
- (c) holding in-service training courses for teachers;
- (d) introducing pre-school education as a specialization in three community colleges, one in Gaza and two in the West Bank.

Sub-project V.2

This sub-project dealing with women literacy programmes aims at:

- (a) supplying women literacy centres with basic vocational equipment for the training of women in certain female crafts, leading to the acquisition of income generating skills;
- (b) providing the 129 literacy centres with adult education reading materials and teaching aids;
- (c) organizing in-service training courses for teachers of adult education centres.

Sub-project V.3

This sub-project dealing with the education and the rehabilitation of the handicapped and the retarded aims at:

- (a) introducing fields of specialization in some selected higher educational institutions in the domain of the education and rehabilitation of the retarded and the handicapped;
- (b) providing specialized equipment for selected institutions from among the five for the deaf, the seven for the blind, the 12 for the

mentally retarded, the six for the physically disabled, as well as the seven institutions dealing with persons having multiple handicaps;

- (c) a programme of training abroad for a number of Palestinian specialists;
- (d) inviting consultants to conduct seminars, workshops and other training activities.

Target groups

Sub-project V.1

One thousand and forty-four teachers of the 213 kindergartens and about 30,000 pre-school children will benefit from this sub-project.

Sub-project V.2

Two hundred and forty-three teachers of adults of the 129 literacy centres and 2,451 adult participants will benefit from this project.

Sub-project V.3

Three hundred and thirty-nine retarded, 304 blind, 167 deaf and 1,438 physically handicapped will benefit from the sub-project in addition to 243 teachers and technical personnel.

C. <u>Development objective</u>

This project has a very important development objective. It aims at the development of the neglected groups that are not usually included in the formal education plans and programmes. The institutions taking care of (a) illiterate women, (b) the mentally retarded and the physically handicapped, and (c) the pre-school children, would be offered aid so that they would be able to provide better services and on a wider scale.

D. <u>Immediate objectives</u>, outputs and activities

Sub-project V.1

1. Immediate objective

Improvement of the quality of education provided in pre-school institutions (213 kindergartens) which would be realized through the in-service training of 1,044 teachers, and the provision of instructional materials and equipment.

1.1. Output !

Pre-school children will have more meaningful learning experiences as a result of:

1.1.1. Activity 1

Providing suitable toys, games and teaching aids.

1.1.2. Activity 2

Providing kindergartens with suitable furniture,

1.2. Output 2

Pre-school education teachers will perform better than they do at present, through:

1.2.1. Activity 1

Attending in-service training programmes.

1.2.2. Activity 2

Providing the teachers with teaching guides and manuals.

1.2.3. Activity 3

Introducing pre-school education as a field of specialization in three community colleges.

Sub-project V.2

1. Immediate objective

Introduction of some elements of vocational education in women literacy programmes will attract more illiterate women to join the literacy centres. Literacy programmes would become more effective in eradicating illiteracy through the improvement of adult reading texts and the training of teachers.

1.1. Output 1

At the end of the course the participating illiterate would be both literate and skilled in some women crafts. As a result they could undertake some income generating activities.

1.1.1. Activity 1

Providing the literacy centres with vocational equipment and training materials.

1.1.2. Activity 2

Organizing in-service training of teachers in the vocational aspects.

1.2. Output 2

Better performance of teachers, through:

1.2.1. Activity 1

In-service training of teachers.

1.2.2. Activity 2

Providing better adult teaching materials.

Sub-project V.3

1. Immediate objective

Improvement of the facilities and the upgrading of the professional skills of personnel of the 37 institutions dealing with the education and the

rehabilitation of the disabled and the handicapped in the West Bank and Gaza Strip.

1.1. Output 1

Performance of the professional and technical staff of the institutions specialized in the education and the rehabilitation of the retarded and the handicapped will be improved.

1.1.1. Activity 1

Sending a number of Palestinian professional and technical staff for further training abroad.

1.1.2. Activity 2

Inviting consultants on short visits to organize seminars, workshops and other training activities for the majority of the technical and professional staff.

1.1.3. Activity 3

Introduction of this type of specialization in some higher education institutions in the West Bank and Gaza.

1.2. Output 2

Specialized institutions in the education and the rehabilitation of the retarded and the handicapped can deal in a better way with an increasing number of patients.

1.2.1. Activity 1

Provision of advanced equipment, as a replacement and an addition, and materials for the institutions concerned.

E. Inputs

Sub-project V.1

- 1. Providing honoraria for local experts to develop pre-school education curriculum and teachers' guides.
- 2. Provision of equipment, furniture and teaching aids for pre-school institutions mainly kindergartens that are in need.
 - 3. Providing funds for holding in-service training programmes.
- 4. Providing funds for introducing pre-school education specialization in three community colleges and two university departments of education.

Sub-project V.2

- 1. Providing various types of basic vocational training equipment and materials related to women crafts.
- 2. Providing funds for organizing in-service training programmes in the vocational aspects as well as in adult education in general.

3. Providing funds for the development of adult education learning materials to be made available for the participants and the teachers.

Sub-project V.3

- 1. Providing specialized equipment for selected institutions.
- 2. Implementing a programme of fellowships for a number of Palestinian specialists ((five) each for a two-month study tour).
- 3. Introducing fields of specialization in some higher education institutions.
- 4. Providing funds for consultants to conduct seminars, workshops and other training activities.

F. <u>Budget</u>

<u>Sub-projects V.1, V.2, and V.3</u> (Budget for non-formal education)

!	! Total	! 1991	1992	! 1993 !
1	! <u>m/m</u> US\$! <u>m/m</u> US\$	_m/m US\$! <u>m/m US\$</u> !
!	!	!	!	!!
! Sub-project V.1	!	!	!	!!
! 10. Project personnel	!	!	!	! !
! 17.01. Local exp for curr.	!	!	!	! !
develop.	! 8,000	! 3,000	! - 5,000	! - !
! 17.02. Loc. exp. spe. uni.	! 7,000	! 3,000	4,000	! - !
! 30. Training	!	!	!	:
! 33.01. In-serv. tr of teach	15,000	! 5,000	5,000	! 5,000 !
! 40. Equipment	!	!	!	!!
! 41. Expendable	5,000	2,000	2,000	! 1,000 !
! 42.Non expendable	! 80,000	! -	! 50,000	! 30,000 !
! 50. Miscellaneous	!	!	!	! !
! 52. Reporting	! 3,000	! -	! -	3,000 !
! 53. Sundries	!2,000	1,000	!1,000	! - !
! Sub-project V.l Total	120,000	!14,000	!67,000	1 39,000 !
!	!	!	!	!
! Sub-project V.2	!	!	!	!
! 10. Project personnel	!	!	!	!
! 17.01. Loc. per. for cur de	! 3,000	! 1,000	! 2,000	· ! - !
! 30. Training	!	!	!	·
! 33.01. In-ser.train.teach.	! 7,000	! 2,000	! 2,000	1 3,000 !
! 40. Equipment	!	!	1	. 3,000 :
41.Expendable	! 5,000	2,000	! 2.000	! 1,000!
! 42. Non-expendable	! 30,000	!	! 10,000	•
! 50. Miscellaneous	!	!	10,000	20,000!
! 52. Reporting	3,000	!		
!53. Cundries	12,000	1,000	!1,000	! 3,000!
! Sub-project V.2 Total	50,000	6,000	17,000	
!	!	1	17,000	27,000
! Sub-project V.3			I	:
! 10. Project personnel	!		•	:
! 11.51. Consultancies	! 2 14,000	1 7,000	! 1 7.000	:
! 17.01. Loc. exp.spe. in un.	! 6,000	1 3,000	.,	: - :
! 30. Training	1 0,000	. 3,000	3,000	: - !
! 31.01. Fellowships	!10 20,000	! 6 12.000		: !
! 40. Equipment	1 20,000	! 6 12,000	! 4 8,000	: - !
! 41. Expendable	! 5,000	. 2.000		!
! 42. Non-expendable		! 2,000	! 2,000	! 1,000!
! 50. Miscellaneous	90,000	40,000	20,000	!!!
: 52. Reporting	. 2 000		:	!
53. Sundries	3,000		: -	! 3,000!
	2,000	1,000	1,000	!!
! Sub-project V.3 Total	! 110,000	. 65,000	1 41,000	! 4,000 !

Cost estimates Project V: Non-formal education (Sub-project V.1, Sub-project V.2 and Sub-project V.3)

	Category	US\$	US\$	%
I.	Construction Sub-project V.1 Sub-project V.2 Sub-project V.3 Sub-total			
II.	Equipment, furniture, materials Sub-project V.1 Sub-project V.2 Sub-project V.3 Sub-total	85,000 35,000 65,000	185,000	
III.	Technical assistance Consultancies Sub-project V.1 Sub-project V.2 Sub-project V.3 Fellowships Sub-project V.1 Sub-project V.2 Sub-project V.2 Sub-project V.3 Sub-total	15,000 3,000 20,000 15,000 7,000 20,000	80,000	
IV.	Miscellaneous Sub-project V.1 Sub-project V.2 Sub-project V.3 Sub-total	5,000 5,000 5,000	15,000	
	Total Sub-project V.1 Sub-project V.2 Sub-project V.3 Total		280,000	

PROJECT VI

Development of facilities for the training of middle-level agricultural and health manpower

Sub-project VI.1 - Development of the two agr cultural secondary schools at Al-Aroub, Hebron district, and at Beet Hanoun, Gaza Strip

Sub-project VI.2 - Improvement of the training facilities of the nine health training centres

Sub-project VI.3 - Establishment of a health education school either in Toulkarem, Jenin or Hebron

A. Context

1. Description of the sub-sector

Agricultural education

There are two agricultural secondary schools in the occupied territories, one is at Al-Aroub, Hebron district, in the West Bank, and the other at Beet Hanoun in the Gaza Strip. However, the most famous agricultural educational institution is that of Toulkarem which is now considered as a community college and part of the higher education system. The admission requirement to the two schools under consideration is the successful completion of the ninth grade, the end of preparatory education. The two agricultural schools are public and were established before the Israeli occupation. Al-Aroub school was established in 1964 and Beet Hanoun school in 1960. Both schools have enough land-site (68 donum for Al-Aroub and 80 donum for Beet Hanoun) sufficient to meet the needs of any additional training programmes. Both schools are in the public sector and are administered and controlled by the Israeli authorities. Students do not pay fees at Beet Hanoun where all of them are day students. Al-Aroub school has a boarding section and students pay an annual fee of 60 J.Ds. (in 1985/86).

Education at the agricultural secondary schools is of three years' duration. The curriculum contains general education and specialized agricultural courses in addition to agricultural field training. In 1985/86, enrolment in the two schools was 157, or 59 at Al-Aroub and 98 at Beet Hanoun. All students are male (in spite of the fact that women play a very important role in agricultural production activities in the occupied territories). The two schools have a staff of 12 teachers, of whom five have a B.A. and seven have a two-year post-secondary study diploma.

Thus the major problem facing agricultural education is that, in its present structure and organization, it does not attract students who finish grade 9 and who, as a general rule, prefer to join the general secondary schools so as to be able later on to pursue their higher education. The two schools seem to be under-utilized due to the small number of students they educate. The second major problem of the agricultural secondary schools is the lack of equipment for use in laboratories, workshops and farm training. What exists of agricultural machinery and tools had been procured before occupation and has neither been replaced nor expanded. A third problem is the fact that the agricultural sector in the West Bank and the Gaza Strip is in real need of

training facilities and programmes. This point is elaborated in the section entitled "Problems to be addressed".

<u>Health</u> education

Health training centres (schools) are post-secondary education and training institutions with two years of study. They train middle-level medical and general health personnel. There are nine such centres, four in Gaza, three in Nablus and two in Jerusalem (there are also three community colleges that have health education as one of their specializations, two of these are located in Ramallah and one in Nablus). Three of the centres are public and were established after occupation, and six centres are private of which four were established after occupation.

Total enrolment in health centres is 794 (1985/86) which is more or less equally shared between the public sector (52%) and the private sector (48%). There are more male students (66%) than female students (34%). It should be mentioned that to this should be added 202 students enrolled in health courses offered in community colleges.

Health education centres

<u>Name</u>	<u>Sector</u>	M.En	<u>F.En</u>	<u>T.En</u>	<u>Location</u>
1. Midwifery and nursing school 2. Shifa hospital nursing school 3. Gaza nursing school 4. Orthodox philanthropic centre 5. Makasid hospital centre 6. Anglican hospital centre 7. Women union hospital centre 8. Baptist health centre 9. Amal cultural centre	Public " Private " " " "	203 80 10 5 20 15 36	35 65 30 12 9 20 12 58 31	35 268 110 22 14 40 27 94 184	Nablus Gaza Gaza Jerusalem Jerusalem Nablus Nablus Gaza Gaza
Total		<u>522</u>	<u>272</u>	794	

Training in the health centres is concentrated in five fields of specialization, namely, nursing, pharmacy assistants, midwifery, general hygiene and laboratory assistants. However, 71% of total enrolment, or 561 is in the field of nursing, 23% or 184 in the field of pharmacy assistants and the remaining enrolment is thinly distributed among the remaining three fields of specialization. It should be mentioned here that, based on data of 1985/86, almost 82.6% of the total enrolment, or 656, is in the Gaza Strip. Nablus has 12.9% or 102 and Jerusalem 4.5% or 36. The three districts of Hebron, Jenin and Toulkarem do not have health education centres (community college health specialization covers Ramallah).

All health education centres except one are functioning in owned premises. Four of the centres are part of functioning hospitals, either public or private and the remaining five centres function as an independent entity. Education and training is free in six centres, and students in three centres pay fees to cover part of the costs.

The total profess nal teaching staff is 122, of whom 27 are part-time staff members. As for qualification of the staff, 15 have M.A. degrees, 105 B.A. degrees and 21 diplomas.

2. Institutional framework of the sub-sector

Agricultural education

The two secondary agricultural schools of Al-Aroub and Beet Hanoun are in the public sector and thus they are under the control of the occupation authorities.

Health education

Three of the nine health education centres are public sector training institutes, thus they are under the control of the occupation authorities. Of the six health education centres of the private sector, three centres belong to philanthropic Christian missions (the Orthodox, the Baptist and the Anglican churches). Two centres belong to Palestinian national philanthropic associations, and the remaining one is private and run on a commercial basis.

B. Project justification

1. Problems to be addressed

Agricultural education

There has been a continuous decrease in the labour force employed in agriculture in the occupied territories. The agricultural labour force and farmers of the West Bank and Gaza have been increasingly employed in the various Israeli industrial activities as unskilled workers. Palestinian agricultural products became less competitive due to discriminatory Israeli practices, the confiscation of land and the control of the sources of irrigation water. However one of the main reasons for the decline of agriculture is the absence of an effective system of agricultural education, training and extension services. The two agricultural secondary schools provide formal agricultural education. They do not have any facilities for the non-formal training of the Palestinian agricultural labour force. Their formal education programmes are not contributing towards the development of agricultural equipment, machinery and tools and the low level of the qualification of the teachers. Because of this situation the two agricultural schools are not attracting enough students. Therefore, the problem is how could the two agricultural schools contribute towards the development of agriculture in the occupied territories so that the agricultural sector could be modernized and competitive.

The need to develop agricultural manpower in the occupied territories is not only limited to middle-level agricultural manpower requirements but also to the higher and technician level for which Project VII of this document tries to provide the answer.

Health education

There are nine health education schools in the West Bank and Gaza which have the main objective of meeting the health middle level manpower requirements. However, the existing system of health education suffers from the following problems:

All schools suffer from shortage of equipment and materials that are necessary for the proper functioning of the schools.

The teaching staff of all the schools need further training and upgrading of skills and competence.

There are certain fields that are not sufficiently covered by the existing schools.

Certain districts specially in the West Bank are not covered by the present network of health education schools.

Expected end of the project

Sub-project VI.1

This sub-project aims at:

- 1. The improvement of the existing agricultural formal education programmes so that the two schools will attract more students and contribute effectively in the development of agriculture by providing well trained skilled agricultural manpower. This could be achieved through the renovation of the equipment of laboratories, workshops and of farms, the provision of teaching materials and the upgrading of the qualification of the teachers.
- 2. The introduction of non-formal agricultural training activities so that the two schools will be able to provide two types of training for already employed agricultural workers (a) the accelerated, and (b) the upgrading of training programmes.

Sub-project VI.2

This sub-project aims at the improvement of the education and training facilities of the nine health education schools through the provision of equipment and training opportunities for the staff.

Sub-project VI.3

The aim of this sub-project is the establishment of a health training school in Jenin or in Hebron or in Toulkarem so that it will provide society with skilled middle-level health manpower.

3. Target groups

Sub-project VI.1

The present enrolment of the two agricultural secondary schools is 157 (59 at Al-Aroub and 98 at Beet Hanoun). It is planned that in this formal education section the school enrolment should be raised to 90 in Al-Aroub and 120 in Beet Hanoum so that the total number of direct beneficiaries is 210.

In the non-formal training section, to be added to the two schools, each school should be able to train 100 agricultural workers annually in various in-service short training courses.

Sub-project VI.2

The present enrolment in the nine health schools is 794. It is planned to increase the total number of beneficiaries to 900. At the same time midwifery, general hygiene and laboratory assistants should be given special consideration in the plans of expansion.

Sub-project VI.3

It is proposed that the total number of beneficiaries of the proposed health education school be 60 students.

C. Development objective

The development objective of the project is the development of the agricultural sector and health services in the occupied territories through the development of more and better trained middle-level manpower in agriculture and health.

D. Immediate objectives, outputs and activities

Sub-project VI.1

1. Immediate objective

Renovating the specialized facilities - laboratories, workshops and farms - of the two agricultural secondary schools by replacing and adding equipment, materials and tools and by offering further upgrading training opportunities for the teaching staff.

1.1. Output 1

The quality of teaching, both theory and practice, could be improved to the extent that more students will be attracted and better job opportunities will be offered for graduates.

1.1.1. Activity 1

Survey of needs, preparation of equipment lists, materials and tools, procurement and distribution of equipment.

1.1.2. Activity 2

Four fellowships for study tours.

1.1.3. Activity 3

Invite consultant - short period - to organize in-service training workshops.

Immediate objective

Adding a new function for the two schools in the field of non-formal agricultural education and training. The two agricultural schools would offer short in-service training courses for about 200 - each 100 - agricultural workers of the West Bank and Gaza.

2.1. Output 1

Already employed agricultural workers would improve their skill and acquire new ones. As a result the level of agricultural productivity would improve.

2.1.1. Activity 1

Preparation of non-formal in-service training programmes, with the help of short consultancy.

2.1.2. Activity 2

Identifying target groups and preparation of work plans.

2.1.3. Activity 3

Organizing information campaigns in rural areas for the non-formal training programmes.

Sub-project VI.2

1. Immediate objective

Improvement and expansion of the existing training facilities of the health training schools so that they would be able to meet middle-level health manpower requirements.

1.1. Output 1

Quality of instruction in the schools would improve and the number trained would increase.

1.1.1. Activity 1

Undertaking a survey to identify the needs of each health school in terms of equipment, materials and the training of personnel.

1.1.2. Activity 2

Preparation of the list for equipment and materials. Procurement and distribution of equipment and materials.

1.1.3. Activity 3

Preparation of a plan for the in-service training of instructors and its implementation with the aid of a consultant.

Sub-project VI.3

1. Immediate objective

Increasing the supply of middle-level health manpower requirements especially in fields where the supply is deficient and the demand is increasing.

1.1. Output 1

A new health education school would be established - location to be determined later - with an enrolment of 60 students.

1.1.1. Activity 1

Construction, equiping and furnishing of the new school.

1.1.2. Activity 2

Preparation of curriculum, recruitment of teachers, short consultancy.

1.1.3. Activity 3

Fellowship. One year training abroad for the principal of the school.

E. Inputs

The financing aid agency provides the following inputs:

Sub-project VI.1

For the renovation and expansion of the two agricultural secondary schools the following is required:

- 1. Equipment for the two schools.
- 2. Funds for in-service training of teachers.
- 3 Consultancies: 2 months.
- 4. Four fellowships: 8 m/m.
- 5. Funds for curriculum development non-formal.
- 6. Two vehicles.

Sub-project VI.2

For the improvement and the expansion of facilities of the nine health education schools:

- Equipment for the nine health schools.
- Funds for in-service training workshops.
- Consultants.

Sub-project VI.3

A new health education school to be established either in Hebron, Toulkarem or Jenin:

- 1. Construction of the building.
- 2. Equipment and furniture.
- 3. Technical assistance: fellowships and consultancies.

F. Budget

		Total		1991		1992	1993	
	m/m	\$SN	m/m	nS\$	m/m	115\$	m/m	US\$
Sub-project VI.1					-			
: 10. Flodett personner ! 11.51. Consultancies	2	14,000	. - .	7,000	_	7,000		 .
1 17.01. Local experts		2,000		3,000		2,000	l 	
: 50. Ilaililig ! 31.01. fellowships	4	8,000	~	4,000	, 	2,000	1 2,000	 8
33.01. In-serv. training		2,000				2,000	1	
40. Equipment				0		0		
41. Expendable		10,000		3,000		3,000	4,000	000
42.Non expendable		80,000		1 0		40,000	40,0	 3
: 43. Venicies (2)		30,000	·· -	20,000		i	ı	· -
		•		6				٠.
SZ. Keporting		4,000		2,000		1		7,000
		3,000		000		000		3
Sub-project VI. lotal		159,000		000.04		000,000	49,000	00
Sub-project VI.2			_ .					•
10. Project personnel								
! 11.51. Consultancies	2 -	14,000		7,000	<u>-</u> .	7,000	ı 	
! 30. Training								
٠.,		5,000		ı		5,000		
! 40. Equipment							_•	
! 41.Expendable		10,000		3,000		3,000	4,000	- .
! 42. Non-expendable		50,000		ı		30,000	20,(- :
! 50. Miscellaneous								
! 52. Reporting		4,000	-	2,000		1	2,000	
: 53. Sundries		3,000		1,000	_	1,000],(0
Sub-project VI.2 Total	2	86,000	_	13,000	_	46,000	27,000	9

53

Sub-project VI.3

Construction of a health education school for 60 students. The total area required is $360~\text{m}^2$ to include all facilities (there is no boarding section), teaching – general and specialized – and administration. Cost per square metre is US\$175 in the base year.

Summary of cost (VI.3)	US\$
<pre>(a) Base cost (1990) Civil works (area 60 x 6 m² = 360 m²) Professional fees (6% of civil works) Equipment/furniture (45% of civil works)</pre>	63,000 3,780 28,600
Total base cost	95,380
(b) Physical contingencies 15% of base cost	13,857
(c) Price escalation 25% of base cost	23,095
Total (a) + (b) + (c)	132,332
Consultancies Fellowships (one) 12 m/m	14,000 24,000
Total	170,332

Cost estimates
Project VI: Agricultural and health manpower
(Sub-project VI.1, Sub-project VI.2 and Sub-project VI.3)

Category	US\$	US\$	%
I. Construction			
Sub-project VI.1			
Sub-project VI.2			
Sub-project VI.3	93,492		
Sub-total		93,492	
II. Equipment, furniture, materials			
Sub-project VI.1	120,000		
Sub-project VI.2	60,000		
Sub-project VI.3	40,000		
Sub-total		220,000	
III. Technical assistance			
Consultancies			
Sub-project VI.1	19,000		
Sub-project VI.2	14,000		
Sub-project VI.3	14,000		
Fellowships	12 000		
Sub-project VI.1	13,000		
Sub-project VI.2 Sub-project VI.3	5,000 24,000		
Sub-total	24,000	89,000	
305-13141		03,000	
IV. Miscellaneous			
Sub-project VI.1	7,000		
Sub-project VI.2	7,000		
Sub-project VI.3			
Sub-total		14,000	
Total			
Sub-project VI.1	159,000		
Sub-project VI.2	86,000		
Sub- <u>p</u> roject VI.3	171,000		
Total		416,000	

PROJECT VII

Consolidation and development of education and training at the community college level

Sub-project VII.1 - Consolidate and improve the technical education facilities in three colleges which offer them

Sub-project VII.2 - Introduction of technical education areas in two community colleges which do not offer them

Sub-project VII.3 - Establishment of two community colleges with an emphasis on technical and teacher education areas

A. Context

1. Description of the sub-sector

A community college is a two-year post-secondary educational and training institution. There are at present 17 community colleges, 15 are located in the West Bank and two in the Gaza Strip. Community colleges play an important role in the field of middle-level manpower training. Historically, community colleges were teacher-training institutions. There came a time in the 1960s in Jordan when universal primary education was almost achieved and the supply of qualified teachers at the compulsory level was more than the demand for them. Therefore it was thought that teacher-training colleges should be called community colleges and they were given the task of meeting middle-level manpower requirements in several fields besides the teaching profession.

In terms of field of specialization in the community colleges, four major fields are offered: (1) health; (2) commercial and management; (3) technical and engineering; and (4) teaching. However based on data of 1985/1986, more than 50 per cent of enrolment are in the teaching profession, then comes the management and administration field.

<u>Field</u>	<u>Enrol</u>	ment			
	М	F	T	7.	
 Health profession Commercial/management Technical/engineering Teacher training 	112 870 671 1,187	90 707 23 1,846	202 1,577 694 3,033	3.7 28.6 12.6 55.1	
Total	2,840	2,666	5,506	100.0	

Of the 17 community colleges, five belong to the government (occupation authorities), three belong to UNRWA, six belong to organizations and philanthropic associations and three belong to the private sector.

All the 17 community colleges are located in the West Bank, with the exception of two that are located in the Gaza Strip. The majority of colleges - nine of them - are located in, or around, or near Jerusalem (five in Ramallah, three in Jerusalem and one in Bethlehem). Areas that could

be considered as deficit in terms of the availability of the services of community colleges are Gaza and the northern part of the West Bank. Jenin in particular does not have a community college at all.

Technical engineering fields are offered in four colleges. In fact one college has an enrolment of only eight students, in civil engineering, so in practice, it is only three colleges that offer training and education facilities in the technical engineering field - two of which are private and one belongs to UNRWA. Two of the three colleges have only one field of specialization (either architecture alone or combined with civil engineering). Therefore it is only the technical college of Hebron which provides education and training facilities in six fields of specialization: civil 150, architecture 90, mechanical 130, electrical 108, agricultural/mechanics 22 and pottery/coloured glass thirty-nine.

Engineering field enrolment

<u>College</u>	Enrolment
Kalendia (UNRWA) Rawdah (Nablus) Hebron technical college Asriah (Nablus) college	96 51 539 8
Total	694

The number of the teaching staff of community colleges is 466, and they are of various academic and professional background. The majority, 72.9% or 336 have a B.A., then comes the category of staff with a M.A. (61 or 13.1%). The student/teacher ratio in all colleges is 7.9, but this ratio differs from one college to another.

It should be mentioned that all government and UNRWA community colleges were established before occupation, while more private community colleges were established after the Israeli occupation with the exception of Al-Najah community college established in 1965.

All government community colleges are operating in owned physical facilities. Two of the three UNRWA community colleges are operating in owned physical facilities, while the third is in rented facilities. Out of the nine private and philanthropic colleges, three are in rented facilities and six are operating in owned physical facilities.

All community colleges provide their teaching services on the basis of day students attendance, with the exception of three government colleges that have boarding facilities and they charge fees. All private colleges, including those that have engineering specialization, charge tuition fees. The occupation authorities charge fees from students of three community colleges (Al-Aroub, Ramallah and Toulkarem). Education is free in UNRWA colleges.

Enrolment in community colleges is almost equally divided sex wise, 51.5% are boys and 48.5% are girls. Female students are more in the teaching profession, while male students are more in the remaining fields, namely health, engineering and management/administration. Nevertheless, it should be pointed out that in the engineering field, girls are very thinly represented, hardly 3% of the total enrolment in the technical/engineering specialization.

2. Institutional framework of the sub-sector

Community colleges in the West Bank and Gaza belong to various controlling agencies. The occupation authorities control five colleges, while UNRWA controls three colleges. There are six colleges that belong to national associations or philanthropic and religious organizations. Such is the case of the Hebron technical college partly controlled and financed by the Hebron Federation of University Graduates. There are three privately owned colleges.

B. Project justification

Problems to be addressed

The Palestinian population in the West, including those of East Jerusalem, and the Gaza Strip is estimated to be 1.5 million of whom two thirds live in the West Bank and one third in the Gaza Strip. The economically active population is 251,000, of whom two thirds are in the West Bank and the remaining one third is in the Gaza Strip. The rate of active population is 35.9% in the West Bank (male 63.9% and female 9.5%) and 33% in Gaza (male 65.4% and female 3.9%).

It is important to note that the participation rate of women in the labour force is very low, 9.5% in the West Bank and 3.9% in the Gaza Strip. The educational implication of this fact is that girls should be encouraged to join the labour force and be active economically through the widening of the technical education opportunities for them.

On the other hand, the occupational distribution of the labour force indicates that 25.6% in the West Bank and 30% in the Gaza Strip are employed as skilled workers in industry, mining, construction and transport, while enrolment in technical subjects in community colleges is only 12%. Thus there is a need to increase the share of enrolment in technical subjects.

Another important indicator is the percentage of labour force that is employed in the occupied territories and those employed in Israel. The rate for the West Bank is 31.4% (47,000 out of 153,000) of the labour force are working in Israel. In Gaza, 46.5% (41,700 out of 90,000) of the labour force work in Israel. It is a well known fact that all Palestinians working in Israel are recruited and employed in the Israeli economy as unskilled workers. Therefore, enrolment in community colleges in general and in the technical fields should be encouraged so that this trend (Palestinians employed as unskilled workers only) might be gradually reversed.

Looking at the problem from the supply - education and training aspect - it will be seen that:

- l. The present technical/engineering educational and training opportunities available in the West Bank and Gaza suffer from low enrolment. To attract more students facilities in existing institutions should be improved and teacher qualification and performance should be upgraded.
- 2. The number of community colleges offering technical/engineering specialization is very small. It is in fact only one college, the Hebron technical college. The other two colleges that offer technical subjects both have a small and negligible enrolment. Therefore there is a need to increase the number of community colleges which offer technical/engineering subjects.

- 3. Girls' enrolment in technical/engineering subjects is almost negligible and there is a need to encourage girls to enrol in such courses.
- 4. There are areas (districts) in the occupied territories in which community colleges are either far below the real needs, or they are in fact completely lacking. Thus there is a need to establish new colleges in such areas.
- 5. In 1986/1989, 20,109 students in the West Bank and the Gaza Strip sat for the Public Secondary Education Examination. The number of those who passed it and thus were eligible for higher education was 12,295. In that same year the admission capacity was 6,844 (1,958 places in community colleges) so the deficit is 5,751 qualified secondary education graduates who do not find places in higher education institutions including community colleges. Therefore there is a need for more community colleges.

Expected end of the project

Sub-project VII.1

This sub-project aims at improving the education and training facilities in the technology/engineering fields in two community colleges that have such facilities. The two colleges are the following:

Hebron technical/engineering college, Hebron; Al-Rawdah technical college, Nablus.

1. Hebron college: it was established in 1978 through private Palestinian initiative represented by the Federation of University Graduates in Hebron. The premises - physical facilities - are owned and the area of the site is $20,000~\text{m}^2$. The college charges fees (1985/86 was 180 J.Ds. annually). There is no boarding section in the college. It is the largest educational institution in the occupied territories offering middle-level technical/engineering specialization. The following is the enrolment according to sex and specialization:

<u>Field</u>	<u>M</u>	E	Ī
Computer Civil engineering Architecture	81	23	104
	150	-	150
	84	6	90
Mechanical engineering	130	-	130
Electrical engineering	108	-	180
Agricultural mechanic	22	-	22
Pottery and glass	33	6	39
Total	608	<u>35</u>	<u>643</u>

In 1985/1986, the number of professional staff was 66, of whom 60 have a B.A. degree, and six have a M.A. degree.

The project aims at (a) increasing female enrolment by 65, and (b) increasing male enrolment by 75. To achieve this expansion and to improve the quality of instruction and training, Sub-project VII.1 provides:

(a) equipment so as to enrich instruction in the seven fields of technical specialization:

- (b) some funds necessary for remodelling the present physical facilities;
- (c) funds for study tour fellowships.
- 2. Al-Rawdah technical college, Nablus: this college was established in 1970 as a private institution. The premises physical facilities are owned and the area of the site is 5,000 m². The college charges fees (125-150 J.Ds.) annually. There is no boarding section in the college. Enrolment is as follows:

Field	<u>M</u>	<u>E</u>	<u>T</u>
Architecture Paramedical: Commercial	40 34 108	11 47 179	51 81 287
Total	182	237	419

The project aims at (a) increasing enrolment in architecture, and (b) paramedical fields up to 75 and 100 respectively. To achieve this expansion and to improve the quality of instruction and training, Sub-project VII.1 provides:

- (a) equipment for the improvement of the quality of training and to meet the needs of expansion;
- (b) funds for study tour fellowships.

Sub-project VII.2

Three community colleges that do not offer training in technical/engineering fields will have facilities which will enable them to offer training in some of these fields.

- 1. Toulkarem community college has a current enrolment of 338 and only trains teachers. It is proposed that it would offer training in civil engineering and computer science.
- 2. Ramallah girls' community college has an enrolment of 250 and only trains teachers. It is proposed that it would offer training in architecture and computer science.
- 3. Umah community college at Jerusalem has an enrolment of 490 in the commercial/management and teaching professions. It is proposed that it would offer training in civil engineering, architecture and computer science.

The first two colleges are public and the third one belongs to the Islamic Endowment Department. The three colleges have enough land for expansion. It is planned that in the three colleges total additional enrolment would be 150 (for each 50 more students). For each of the three colleges there would be a need for construction, equipment, furniture, materials and technical assistance.

Sub-project VII.3

It is proposed to establish two new community colleges, one in Jenin and the other in Gaza. Enrolment in each would be 300. It is proposed that in each college there would be three fields of specialization: (1) teaching; (2) commercial/management; and (3) technical/engineering. For each of the two colleges there would be a need for construction, equipment, furniture and materials as well as technical assistance which would include consultancies and fellowships.

3. Target groups

Sub-project VII.1

Nine hundred and fifty-eight students will benefit from expansion and improvement in technical/engineering facilities (783 in the Hebron technical college and 175 in the Al-Rawdah technical college, Nablus).

Sub-project VII.2

The selected three colleges do not have at present any offerings in the technical/engineering fields. By adding facilities in these fields a total of 150 students will be the beneficiaries in the three existing colleges.

Sub-project VII.3

The total number of beneficiaries in the two new community colleges is 600 (300 students in each).

C. Development objective

This project aims at the economic development of the Palestinians with special emphasis on the industrial sector through the improvement and expansion of the middle level manpower education and training facilities in the technical and engineering areas.

D. <u>Immediate objectives</u>, outputs and activities

Sub-project VII.1

1. Immediate objective

Improvement and expansion of technical/engineering training facilities in two existing community colleges, in Hebron and Nablus. Girls' enrolment will be encouraged in the technical/engineering areas.

1.1. Output 1

Enrolment in Hebron technical college would increase by 140 (75 boys and 65 girls) and in Al-Rawdah college in Nablus by 43. Training in the two colleges would improve considerably through the provision of more and better equipment, improving physical facilities and sending staff members for further training abroad.

1.1.1. Activity 1

Preparation of equipment list, procurement and distribution of equipment and materials.

1.1.2. Activity 2

Remodelling some of the physical facilities to accommodate the new changes.

1.1.3. Activity 3

Professional staff sent abroad on study tours.

Sub-project VII.2

1. Immediate objective

Three community colleges (Toulkarem, Ramallan and Jerusalem) that do not provide training in technical/engineering areas would be provided with facilities which would enable them to provide training in these fields. Facilities will be provided for 150 additional students for the three institutions.

1.1. Output 1

Three colleges are starting to provide the Palestinian economy with middle-level trained manpower in the technical/engineering areas.

1.1.1. Activity 1

Design and construction of the necessary physical facilities.

1.1.2. Activity 2

Preparation of the list for equipment, furniture and materials. Procurement of equipment/furniture.

1.1.3. Activity 3

Recruitment of consultants needed and sending of the required fellowship-holders abroad.

Sub-project VII.3

1. <u>Immediate objective</u>

Community colleges to be established, one in Jenin and the other in Gaza to supply the economy with middle-level trained manpower in the teaching, commercial and technical fields.

1.1. Output 1

Two colleges would produce 300 graduates in the above-mentioned three areas (each college has an enrolment of 300 and the duration of studies is two years).

1.1.1. Activity 1

Choice of sites, selection of consultants, design, preparation of bidding documents, selection of contractors, construction.

1.1.2. Activity 2

Preparation of the list for equipment, furniture and materials. Procurement of equipment/furniture.

1.1.3. Activity 3

Preparation of curriculum for all fields of specialization in the three areas.

1.1.4. Activity 4

Recruitment of technical staff: programme of fellowships and consultancies.

E. <u>Inputs</u>

The financing aid agency provides the following inputs:

Sub-project VII.1

- 1. Equipment for the two existing colleges.
- 2. Funds for remodelling physical facilities.
- 3. Fellowships for study tours, four fellowships.

Sub-project VII.2

- 1. Construction (for 150 students).
- 2. Equipment, furniture, materials.
- 3. Technical assistance.

Sub-project VII.3

- 1. Construction for two community colleges, each with an enrolment of three hundred.
- 2. Equipment, furniture and materials covering three fields of specialization, teaching, commercial and technical/engineering.
- 3. A programme of technical assistance: consultancies and fellowships.

F. <u>Budget</u>

Sub-projects VII.1 and VII.2

	!	Total ! 1991 !			1992 !	
!	! <u>m/m</u>	<u>US\$</u> !	m/m	US\$!	m/m	US\$!
	!	, !				!
! Sub-project VII.]	!					!
! 10. Project personnel	:	7 000	,	7 000		
! 11.51. Short consultancy	:	7,000	l	7,000		- !
! 30. Training	:	30 000		14.000	:	14 000 1
! 31.01. Fellowships	! 4	28,000	2	14,000	! 2	14,000 !
! 40. Equipment	:	10,000		5,000	:	F 000 1
<pre>! 41. Expendable ! 42.Non expendable</pre>	; 1	110,000	i I	30,000	; 1	5,000 !
! 50. Miscellaneous	·	110,000	; 	30,000	1	80,000!
! 52. Reporting	i	3,000	I	_	I	3,000 !
! 53. Sundries	į	5,000	I	2,000	i	3,000 !
! Sub-project VII.1 Total	<u> </u>	163,000	!	58,000	<u>;</u> —	105,000 !
!	!		! !		<u>. </u>	1
! Sub-project VII.2	!		!		ļ	į
! 10. Project personnel	!		!		!	1
! · 11.51. Short consultancies	! 1	7,000	! •	_	! 1	7,000 !
! 30. Training	!		!		1	!
! 31.01. Fellowships (region)	! 48	48,000	! 24	24,000	!24	24,000 !
! 40. Equipment	!	•			!	!
41.Expendable	!	10,000	!	5,000	!	5,000 !
42. Non-expendable	!	150,000	!	30,000	!	120,000 !
50. Miscellaneous	:		!		!	!
! 52. Reporting	1	4,000	:	-	!	4,000 !
53. Sundries (including	: /25	30,000	:	10,000	:	20,000
! physical facilities	: (25	,000+5,000)	:		:	;
! remodelling ! Sub-project VII.2 Total	<u>:</u>	249,000	: 2	69,000	;	190 000
. Sun-biolect All's intal	•	249,000	٠	09.000	·	180,000!

Sub-project VII.3

Two community colleges with a total of 600 student places.

Summary of costs (VII.3)	US\$
(a) Base cost (1990) Civil works (area 600 x 15 m ² x US\$175) Professional fees (6% of civil works) Furniture/equipment (50% of civil works)	1,575,000 94,500 787,500
Total base year	2,457,000
(b) Physical contingencies 15% of base cost	368,550
(c) Price escalation 25% of base cost	614,250
Technical assistance Fellowships (240 m/m: 20 fellowships) Chief technical assistant (2 m/y)	240,000
Total	3,899,800

Cost estimates Project VII: Community colleges (Sub-project VII.1, Sub-project VII.2 and Sub-project VII.3)

Category	US\$	US\$	%
I. Construction			
Sub-project VII.1			
Sub-project VII.2	25,000		
Sub-project VII.3	2,337,300		•
Sub-total		2,362,300	
II. Equipment, furniture, mater	ials		
Sub-project VII.1	120,000		
Sub-project VII.2	160,000		
Sub-project VII.3	1,102,500		
Sub-total		1,382,500	
III. Technical assistance			
Consultancies			
Sub-project VII.1	7,000		
. Sub-project VII.2	7,000		
Sub-project VII.3	220,000		
Fellowships			
Sub-project VII.1	28,000		
Sub-project VII.2	48,000		
Sub-project VII.3	240,000		
Suh-total		550,000	
IV. Miscellaneous			
Sub-project VII.1	8,000		
Sub-project VII.2	9,000		
Sub-project VII.3			
Sub-total		17,000	
Total			
Sub-project VII.1	163,000		
Sub-project VII.2	249,000		
Sub-project VII.3	3,899,800		
Total		4,311,800	

PROJECT VIII

Development of existing higher education training in paramedical, technological and engineering fields

Sub-project VIII.1 - Development of the paramedical training facilities in

(a) the paramedical college of Jerusalem University, and

(b) the nursing college of Bethlehem University

Sub-project VIII.2 - Development of the training facilities of the technology college - Abu-Dis - of Jerusalem University

Sub-project VIII.3 - Development of the department of engineering at (a) Birzeit University, and (b) Al-Najah National University

Sub-project VIII.4 - Establishment of a new faculty of engineering at Gaza University and a new faculty of agriculture at Hebron University

A. Context

1. Description of the sub-sector

All the six universities in the occupied territories were established after the Israeli occupation of 1967. The Palestinians having found themselves isolated from the rest of the world, found no other solution for providing educational opportunities at the higher level except to start establishing universities themselves. Enrolment was 14,897 in 1986/87, and has tripled since 1979/80. The following is the enrolment in the six universities:

<u>Universities</u>	<u>No</u> .	<u>%</u>
Gaza Al-Najah Birzeit Bethlehem Hebron Jerusalem	4,483 3,416 2,381 1,437 1,603 1,577	30.1 22.9 16.0 9.6 10.8 10.6
Total	14,897	100.0

In addition to the six universities inside the occupied territories, there is Al-Quds Open University located in Amman. Unesco carried out the feasibility study and the establishment of the university was officially announced in 1988. The open university would adopt distance learning strategy based on principles of self-learning techniques and multimedia approaches.

Girls' participation rate in total enrolment is 39%, with the highest rate being 56.8% in Jerusalem University. Students, specially girls, prefer to enrol in a university which is nearest to their residence. The provision of university education nearest to students' residence is the main reason for the multiplicity of universities in the occupied territories.

University education in the occupied territories stresses more the study of arts and humanities than the study of science and technology as the following table shows:

Specialization	<u>Enrolment</u>	<u>%</u>
Humanities Education Commerce/administration Religious disciplines Science Technology	4,860 1,979 2,155 1,932 2,536 882	33.9 13.8 15.0 13.3 17.7 6.1
Total	14,344	100.0

All the six universities offer humanities courses, five offer science courses, four offer commerce/public administration courses, three offer education courses, three offer courses in religion, and one offers paramedical courses. All universities emphasize the teaching function. Research is not carried out because of the lack of funds and an economy that needs research. Community service activities are very limited due to the lack of security and funds. The number of the teaching staff is 859, of whom 321 have a Ph.D. and 346 a M.A. degree. The student/teacher ratio is 17, which is judged to be high. There is a staff training programme at Ph.D. and M.A. degree levels.

2. Institutional framework of the sub-sector

The Council of Higher Education, established on 17 June 1977, has the main aim of safeguarding the interests and future of higher education under occupation. The Council represents professional associations and societies of engineers, lawyers, physicians, pharmacists, dentists and agricultural engineers. The Council is administered by an Executive Committee. Its financial resources come from donations, contributions and wills. The Higher Education Council's main objectives are:

- 1. Co-ordination between universities with the main objective of developing them into better levels and standards.
- 2. Establishment of universities and other higher education institutions in accordance with the needs and available funds.
- 3. Carrying out research, surveys and other activities that will lead to the improvement of quality and the preservation of the Palestinian culture.
- 4. Mobilization of financial resources locally and externally for the benefit of higher education.
- 5. Providing financial help to deserving and academically meriting students.
- 6. Preparation and training of the necessary teaching staff through a staff training programme and the provision of scholarships for training abroad.

B. Project justification

1. Problems to be addressed

Higher education in the occupied territories suffers from several problems. Some of these are the result of the shortage of funds that are necessary for the development of higher education both in the short-term perspective as well as the long-term one. First, physical facilities, both

general and specialized, need renovation. Existing facilities need to be maintained and repaired and new ones are needed for future development to meet future needs. Another problem is related to the first one. Most higher education institutions need to replace existing equipment and to add new equipment for expansion purposes. Still more important is the need for an extensive staff training programme. There is also a need to provide all higher education institutions with the minimum necessary teaching materials and sources of information, including the development of libraries.

However, the most important problem faced nowadays in the occupied territories in higher education is related to the imbalance that exists between enrolment in arts/humanities/public administration courses and science/technology courses. The imbalance is severe and is in favour of the arts and humanities fields of specialization. It is estimated that 76.2% of the higher education (university) students are enrolled in the arts and humanities courses. Of course this imbalance has implications on meeting present manpower requirements. There is a surplus of the arts graduates on the labour market. In addition to the problem of the imbalance in university offerings there is the problem of the fact that some fields of specialization are not taught at all, like pharmacy, medicine and agriculture. In addition to this there is the problem of the geographical distribution of such fields of specialization specially between the West Bank and the Gaza Strip. Thus there is a need to provide educational facilities in the field of technology in the areas which do not have it.

This project, with its four sub-projects, proposes to offer solutions to four specific problem areas in higher education in the occupied territories.

The first specific area is related to the need to develop paramedical training facilities including nursing. At present such fields are taught in two universities, Jerusalem and Bethlehem. Nursing and paramedical fields are taught at Birah paramedical college affiliated to the University of Jerusalem. The college was established in 1979 with four departments, three of which are related to paramedical professions and the fourth one to nursing (enrolment in the college is 102 in the nursing department and 53 in the remaining three paramedical fields). Students get a B.Sc. degree after four years of study. The other university providing training in nursing is that of Bethlehem. It has an enrolment of 84 (in 1985/86). At present, there is an urgent need to increase the number of graduates from the nursing and the paramedical professions to meet the increasing demand for them.

The second specific problem to which a sub-project is addressed is related to the shortage of supply in some technical specializations. Science as such is now taught in five of the six universities, with the exception of Hebron University. There are 513 science students enrolled in Gaza University, 315 in Bethlehem, 521 in Birzeit and 600 in Jerusalem University at Abu-Dis college. Abu-Dis college of science and technology is composed of two departments, one for science, with four sections: physics, chemistry, biology and mathematics, and the other department is that of technology and it has four sections: computer, electronics, chemical technology and paramedical technology. Jerusalem University is the only one among the six universities that has these technological fields.

The third specific problem to be addressed is the need to improve the present engineering education facilities. At present engineering education is being provided in two universities in the occupied territories, that of Birzeit with an enrolment of 431 in civil, electrical and mechanical engineering, and Al-Najah University with an enrolment of 212 in architecture and civil engineering, making a total of 643 students enrolled in engineering courses.

The fourth problem is the lack of higher education facilities in agriculture in all the occupied territories and the lack of engineering in Gaza.

2. Expected end of the project

Sub-project VIII.1

- Providing better and more training facilities in the three paramedical fields in addition to the training of nurses at Birah paramedical college affiliated to Jerusalem University.
- 2. Providing better and more training facilities of nurses at the University of Bethlehem.

Sub-project VIII.2

This project aims at developing the four technological fields that are offered at Abu-Dis college of technology, Jerusalem University. The end result should be the improvement of the present training facilities in the technological fields in addition to the provision of new facilities so that enrolment could be increased by 30% in the technological fields, namely, computer science, electronics, chemical technology and paramedical technology.

Sub-project VIII.3

This sub-project aims at: (1) improving and expanding training facilities in the college of engineering (civil and architecture) at Al-Najah University, Nablus; (2) improving and expanding training facilities in the college of engineering (mechanical, electrical and civil engineering) at Birzeit University.

Sub-project VIII.4

This sub-project aims at the establishment of a college of agriculture at Hebron University and the establishment of a college of engineering at Gaza University. (The Gaza Strip has only one university which does not have a college of engineering. As for agriculture, there is no college of agriculture as such in the occupied territories. There is in fact a department of agricultural sciences within the college of science at Al-Najah University.)

3. Target groups

Sub-project VIII.1

The number of beneficiaries of Birah paramedical college is 102 in nursing and 53 in the paramedical fields. It is planned that total enrolment will be 150 in nursing and 100 in the paramedical professions. As for the nursing college of Bethlehem University, the number of beneficiaries is 84 plus an expansion of 76, making the total one hundred and sixty.

Sub-project VIII.2

It is estimated that the number of students who are benefiting in the technological fields is about 200. It is planned to add more facilities so that the total number of students benefiting from the sub-project would be three hundred.

Sub-project VIII.3

The present enrolment in the college of engineering at Birzeit is 431 and at the college of engineering at Al-Najah University 212. It is planned that the total number of beneficiaries would be 500 engineering students at Birzeit University and 300 engineering students at Al-Najah National University.

Sub-project VIII.4

It is planned that the newly established college of engineering at Gaza University will have 450 students and the newly proposed college of agriculture at Hebron University will have 550 students. So the total number of beneficiaries is 1,000 students.

C. Development objective

The development objective of the four sub-projects is to meet the higher level manpower requirements in the engineering and technological fields so as to contribute towards the economic development (industrial and agricultural) of the Palestinian society. This development objective would be achieved through the improvement and the establishment of engineering and technology educational institutions in some selected universities of the West Bank and the Gaza Strip.

D. Immediate objectives, outputs and activities

Sub-project VIII.1

1. <u>Immediate objective</u>

The existing training facilities at (a) the Birah paramedical college of Jerusalem University, and (b) the college of nursing at Bethlehem University will be improved and expanded through the provision of better and more equipment, the training of local staff and the provision of expertise.

1.1. Output 1

More and better graduates would be produced in nursing and three fields of paramedical professions from the Jerusalem and Bethlehem Universities.

1.1.1. Activity 1

Undertaking a survey to determine the magnitude of the needs for equipment and training of staff.

1.1.2. Activity 2

Preparation of equipment list, procurement of equipment and its distribution.

1.1.3. Activity 3

Selection of candidates for fellowships, preparing a fellowship plan and its implementation.

1.1.4. Activity 4

Determining the exact need for expertise and the recruitment of experts; consultants.

1.1.5. Activity 5

Determining whether some physical facilities remodelling is required for meeting needs of expansion.

Sub-project VIII.2

1. Immediate objective

Development of the college of technology at Abu-Dis, Jerusalem University - in electronics, chemical technology, computer science and paramedical technology - so that the quality of instruction will be improved and the number of graduates will be increased.

1.1. Output

More and better graduates would be produced in strategic technological professions.

1.1.1. Activities

The same as in Sub-project VIII.1.

Sub-project VIII.3

1. Immediate objective

Improvement of the existing engineering colleges in the occupied territories, namely the college of engineering at Al-Najah University - in civil engineering and architecture, and at the college of engineering at Birzeit University, in civil, mechanical and electrical engineering.

1.1. Output

More and better graduates would be produced in certain specified engineering fields.

1.1.1. Activities

The same as in Sub-project VIII.1.

Sub-project VIII.4

1. <u>Immediate objective</u>

Establishment of a college of engineering in Gaza University and a college of agriculture at Hebron University. The college of engineering in Gaza will meet the needs for higher-level trained engineering manpower in the Gaza Strip in the fields of civil, electrical, mechanical engineering as well as in architecture. The college of agriculture of Hebron will meet the needs for higher-level agricultural manpower in the occupied territories as a whole.

1.1. Output 1

Graduates in certain fields of engineering will be produced for the Gaza Strip, and graduates in agriculture will be produced for the West Bank and the Gaza Strip. (Enrolment at the engineering college is 350 and the agricultural college 450, total 800, and graduates about 200 in engineering and agriculture.)

1.1.1. Activity 1

Selection of sites and topographic surveys.

1.1.2. Activity 2

Design, bidding procedures and selection of contractors, contract signature and construction.

1.1.3. Activity 3

List, specifications of furniture and equipment, bidding documents, advertising, selection of contractors, delivery and distribution.

1.1.4. Activity 4

Preparing a programme of fellowships and consultancy. Its implementation.

E. Inputs

Sub-project VIII.1

(Nursing and paramedical professions: Jerusalem and Bethlehem Universities):

Equipment, furniture, teaching aids and materials

(a) Improve equipment for existing enrolment	239
(b) Add new equipment for additional enrolment	171
Total enrolment	410

Cost of any necessary remodelling or construction of new physical facilities

Improve present curriculum

Three fellowships - 9 m/m each

Consultancies - 3 m/m.

Sub-project VIII.2

(College of technology: Abu-Dis, Jerusalem University):

Equipment, furniture, teaching aids and materials

(a)	Improve	equipment	for	existing enrolment	200
(b)	Add new	equipment	for	additional enrolment	100

Total enrolment 300

Cost of any necessary remodelling or construction of new physical facilities

Improve present curriculum

Three fellowships - 9 m/m each

Consultancies - 4 m/m.

Sub-project VIII.3

(College of engineering: Al-Najah and Birzeit Universities):

Equipment, furniture, teaching aids and materials

(a) Improve equipment for existing enrolment(b) Add new equipment for additional enrolment157

Total enrolment 800

Cost of any necessary remodelling or construction of new physical facilities

Improve present curriculum

Three fellowships - 9 m/m each

Consultancy - 1 m/m.

Sub-project VIII.4

(Establishing a college of engineering: Gaza, and a college of agriculture in Hebron):

Construction (teaching and administration) for

(a) Gaza college of engineering: enrolment(b) Hebron college of agriculture: enrolment550

Total enrolment 1.000

Equipment, furniture and materials

Technical assistance

- (a) Eight fellowships: four M.A. and four Ph.D.
- (b) Two experts: each for 12 m/m.

F. <u>Budget</u>

Sub-projects VIII.1, VIII.2 and VIII.3

	. T	otal	 !	1991		1992	<u></u>	1993 !
	! m/m	US\$	m/m		m/m		! m/m	US\$!
	!				. ————————————————————————————————————		!	!
Sub-project VIII.1	!		!		!		<u>.</u>	į
! 10. Project personnel	!		!		!		!	i
11.51. Consultancies	! 3	21,000	! 2	14,000	!	_	! 1	7,000 !
! 17.01. Loc. exp. for curr.	!	9,000	!	6,000	!	3,000	!	- !
! 30. Training	!	•	!	• • • • • • • • • • • • • • • • • • • •	!		!	
1 31.01. Fellowships	27	75,000	! 18	50,000	! 9	25,000	!	- !
: 40. Equipment	!	-	!	•	!	•	!	!
41. Expendable	!	25,000	!	_	!	10.000	!	15.000 !
! 42.Non expendable	!	230,000	!	_	!	80,000	!	150,000 !
: 50. Miscellaneous	1		į.		!		!	!
! 52. Reporting	ļ	7,000	!	2,000	!	_	!	5,000 !
! 53. Sundries	!	15,000	!	5,000	!	5,000	!	5,000 !
! Sub-project VIII.1 Total	!	382,000	!	77,000	!	123,000	!	182,000 !
!	!		!		!		!	!
! Sub-project VIII.2	!		!		!		!	!
! 10. Project personnel	!		!		!		!	!
! 11.51. Consultancies	! 4	28,000	! 2	14,000	!	_	! 2	14,000 !
! 17.01. Loc. per. for curr.	!	9,000	!	6,000	!	3,000	!	- !
! 30. Training	!		!		!		!	!
: 31.01. Fellowships	! 27	75,000	! 18	50,000	! 9	25,000	!	- !
! 40. Equipment	!		!		!		!	!
! 41.Expendable	!	20,000	!	-	!	10,000	!	10,000 !
! 42. Non-expendable	!	215,000	!	-	!	35,000	!	180,000 !
! 50. Miscellaneous	!		!		!		!	!
! 52. Reporting	!	7,000	!	2,000	!	_	!	5,000 !
!53. Sundries	!	15,000	!	5,000	!	5,000	!	5,000
! Sub-project VIII.2 Total	!	369,000	!	77,000	!	78,000	!	214,000 !
!	!		!		!		!	!
! Sub-project VIII.3	!		!		!		!	!
! 10. Project personnel	!		!		!		!	!
! 11.51. Consultancies	: 1	7,000	! 1	7,000	!	-	!	- !
! 17.01. Loc. exp. for curr.	!	4,000	!	3,000	!	1,000	!	- !
! 30. Training	! 27	75,000	: 18	50,000	! 9	25,000	!	- !
! 40. Equipment	!		!		!		!	!
! 41. Expendable	!	20,000	!	-	!	10,000	!	10,000
! 42. Non-expendable	!	220,000	!	-	!	40,000	!	180,000
! 50. Miscellaneous	į.		!		!		!	!
! 52. Reporting	!	7,000	!	2,000	1	_	!	5,000
! 53. Sundries	!	15,000	!	5,000	!	5,000	!	5,000
! Sub-project VIII.3 Total	!	348,000	!	67,000	!	81,000	!	200,000

Sub-project VIII.4

Costing of the two colleges is carried out together as one institution. Total enrolment is 1,000; 450 for engineering and 550 for agriculture.

Summary of	cost (VIII.4)	US\$
(a)	Base cost (1990) Civil works (area 1,000 x 12 m ² x US\$175) Professional fees (6% of civil works) Equipment/furniture (50% of civil works)	2,100,000 126,000 1,050,000
	Total base cost	3,276,000
(b)	Physical contingencies 15% of base cost	491,400
(c)	Price escalation 25% of base cost	819,000
Total	(a) + (b) + (c)	4,586,400
(d)	Technical assistance CTA - Expert (1 m/y) (US\$110,000 m/y)	110,000
	Fellowships (a) Eight Ph.D. (24 m/y) (b) Ten M.Sc. (10 m/y)	799,200 333,000
Grand	i total (a) + (b) + (c) + (d)	5,828,600

Cost estimates
Project VIII: University development
(Sub-project VIII.1, Sub-project VIII.2 and Sub-project VIII.3)

	Category	US\$	US\$	7.
I.	Construction Sub-project VIII.1 Sub-project VIII.2 Sub-project VIII.3 Sub-project VIII.4 Sub-total	3,116,400	3,116,400	
II.	Equipment, furniture, mater Sub-project VIII.1 Sub-project VIII.2 Sub-project VIII.3 Sub-project VIII.4 Sub-total	ials 255,000 235,000 240,000 1,470,000	2,200,000	
-III.	Technical assistance Consultancies Sub-project VIII.1 Sub-project VIII.2 Sub-project VIII.3 Sub-project VIII.4 Fellowships Sub-project VIII.1 Sub-project VIII.2 Sub-project VIII.3 Sub-project VIII.3 Sub-project VIII.4 Sub-total	30,000 37,000 11,000 110,000 75,000 75,000 75,000 1,132,000	1,545,000	
IV.	Miscellaneous Sub-project VIII.1 Sub-project VIII.2 Sub-project VIII.3 Sub-project VIII.4 Sub-total	22,000 22,000 22,000	66,000	
	Total Sub-project VIII.1 Sub-project VIII.2 Sub-project VIII.3 Sub-project VIII.4 Total	382,000 369,000 348,000 5,828,600	6,927,600	

PROJECT IX

Staff development programme at the university and the community college level

A. Context

1. Description of the sub-sector

Due to continuous Israeli occupation of the West Bank and the Gaza Strip since 1967 up to the present time, the majority of the existing post-secondary institutions teaching staff - those of community colleges and universities - have not been offered enough opportunities for further professional growth. Leaving aside the teaching staff of the health centres, community colleges have 466 teaching staff (there are 122 staff for the health centres). The following is a table showing the teaching staff of community colleges by qualification:

Category	<u>No</u> .	<u>%</u>
Ph.D. M.A. Diploma B.A. Less than B.A.	9 61 42 336 18	1.9 13.1 9.0 72.1 3.9
Total	466	100.0

As for university teaching staff, there are 859 staff (1986/87), working at the six universities of the West Bank and the Gaza Strip. There is a high percentage of teaching staff with Ph.D. degrees (35.1%) specially at Al-Najah University (50.5%) and at Birzeit University (46.4%). There is also a high percentage of staff with M.A. degrees as the following table demonstrates:

Category	<u>No</u> .	<u>%</u>
Ph.D. M.A. B.A. Diploma	313 342 221 17	35.1 38.3 24.7 1.9
Total	893	100.0

There has been a programme of staff training applied to the six universities and prepared and planned by the Council of Higher Education. (No data available concerning the fellowship programme for the community colleges.) There was a total in 1986/87 of 224 scholars studying abroad either for M.A. or Ph.D. degrees. It is reported that the majority of the fellowships are in the fields of arts, social science and public administration. Moreover, information is not available regarding the exact fields of specialization of the fellowships. There is no information regarding the countries to which the fellowship-holders have been sent. It should be mentioned that only 14.3% of the total number of fellowship-holders are females (the ratio of females among the staff is 18.7%). Also 64.7% of the fellowship-holders have been sent to get their Ph.Ds. The following is a table for fellowship-holders by university and the level of degree:

Category	Ph.D.	<u>M.A.</u>	<u>Total</u>
Gaza University Al-Najah University Birzeit University Bethlehem University Hebron University Jerusalem University	32 44 31 9 1 25	30 9 7 5 - 26	62 53 38 14 1 51
Total	145	79	<u>224</u>

2. Institutional framework of the sub-sector

The Council of Higher Education established in 1977 (please see Project VIII for details on the Council) is in charge of the planning aspect of higher education in the occupied territories. Any programme of university staff training should be prepared and put into action in consultation with the Palestinian Council of Higher Education.

B. Project justification

1. Problems to be addressed

Ever since the occupation of the West Bank and the Gaza Strip in 1967 by Israel, all higher education institutions — both the community colleges and universities — have been more or less functioning in isolation of the outside world. This had several negative effects on the quality of higher education in the occupied territories. One of these negative effects is the fact that the majority of the members of the teaching staff have been out of contact with the outside world and consequently with the latest academic and scientific developments. Naturally, this situation has negatively affected the effectiveness of the teaching role of the university staff and has reduced to the minimum the research activities.

In addition to the problem of academic isolation which the university staff have been experiencing, there was the lack of further education opportunities which aim at upgrading the level of professional qualification. In spite of the present staff training programme there is a need for elaborate and more extensive training programmes abroad which permits a number of B.A. holders to get their M.Sc. and for those who have their M.A. or M.Sc. to get their Ph.D. There is a need for more educational opportunities in the scientific and technological fields.

2. Expected end of the project

After the implementation of the proposed fellowship programme consisting of: (a) a six-month fellowship refresher course, (b) an 18-month M.A. fellowship course in science and technology, and (c) a 36-month Ph.D. fellowship course, academic life in universities and community colleges in the occupied territories will be reactivated and the quality of education will be improved.

Target groups

It is proposed that:

twenty-five senior lecturers and professors in the six universities in the occupied territories are to be sent on refresher courses of a duration of six months each in well-known centres of higher education; ten candidates from universities and community colleges for M.A. fellowships, each for a period of 18 months;

ten candidates from universities in the occupied territories for Ph.D. fellowships, each for 3 m/y or 30 months.

C. <u>Development objective</u>

This project would in the final analysis contribute towards the improvement of the quality of the higher level manpower being trained and educated at the universities and community colleges through the improvement of the quality of teaching.

D. Immediate objectives, output and activities

1. <u>Immediate objective</u>

This project aims at providing three kinds of fellowships - refresher courses, M.A. and Ph.D. - for the staff of the community colleges and universities in the occupied territories with the main objective of improving the quality of education at the post-secondary level.

1.1. Output 1

The following categories of staff would be trained: (a) 25 senior lecturers, (b) ten candidates for a M.A. degree, and (c) eight candidates for a Ph.D. degree.

1.1.1. Activity 1

Select candidates for the three types of fellowships. Determine the share of cach institution out of each type of scholarship.

1.1.2. Activity 2

Select institutions - international - for each of the three types of scholarships - which countries.

E. Inputs

Funds will be provided for:

- Refresher courses in international institutions: 25 fellowships, each for six months. Total is 150 m/m (cost for six months is US\$18,300).
- M.A. fellowship course: ten fellowships in international institutions. Each M.A. course is for 18 months (cost for each course is US\$50,000).
- 3. Ph.D. fellowship course: five international fellowships, each for three years (cost for one year is US\$33,300) and five regional fellowships, each for three years (cost for one year is US\$21,400).
- 4. Short consultancies (3 m/m) for the preparation and evaluation of the fellowship programme.

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oject	
Pro	

		Total		1991		1992		1993		1994		1995
	m/m	SON I	m/m	\$SO	m/m	\$SN	m/m	\$SN	m/m	\$SN	m/m	SON S
! 10. Project personnel											- .	
! 11.51. Short consultancies		21,000		14,000		1		ı		,		7,000
: 30. Training												
: 31.01. Fellowships	٠.											
! - Refreshing course (25))	1150	457,500	30	91,500	30	91,500	30	91,500	30	91,500	30	91,500
! - M.A. degree (10)	:180	499,700	24	99,600	36	006,66	1 48	133,200	54	150,000	- 18	50,000
! - Ph.D. degree (5) intern.	1180	499,500	36	99,900	99 ;	166,500	09 ;	166,500	1 24	99,600		. 1
! - Ph.D. degree (5) regional	:180	321,000	36	64,200	9 ;	107,000	9 ;	107,000	: 42	42,800		1
: Sub-total fellowships	1690	1,777,700	106	322,200	1186	464,900	198	498,200	1132	350,900	48	141,500
: 50. Miscellaneous								•				
: 52. Reporting	_	7,000		2,000		1		1		ı		5,000
Project IX Total		1,805,700	_	338,200		464,900		498,200		350,900		153,500

Costs estimates

74		1	1 1	1 1	ı
\$\$0	1	t	1 1 6	000'.28',100	1,805,700
\$ \$N		ı	21,000	7,000	
Category	I. Construction	II. Equipment	<pre>III. Technical assistances Consultancies Fellowships</pre>	sub-total IV. Miscellaneous	Total

PROJECT X

Development of management and educational planning

A. Context

Sub-sector and institutional framework

Under occupation, the West Bank is divided into six district education offices in Nablus, Jenin, Toulkarem, Ramallah, Bethlehem and Jericho, and Hebron. The Gaza Strip consists of only one education office.

The number of administrative employees in 1987/88 totalled 103. All district offices have 17 administrative employees each, except the Hebron and Nablus districts which have 18 employees each. The number of technical employees - inspectors - totalled 53 in the same year. The members of both categories of employees are divided as follows in the six education offices of the West Bank (those of Gaza are pure estimates).

<u>District</u>	<u>Administrative</u>	<u>Inspectors</u>
I. West Bank Nablus Janin Toulkarem Ramallah Bethlehem and Jericho Hebron	18 17 17 17 17 18	11 8 8 8 8
Sub-total	103	53
II. Gaza Strip	25	15
Grand total	128	<u>68</u>

UNRWA schools in the West Bank — mainly primary and preparatory schools, one vocational school and two community colleges — are under the administrative control of UNRWA's education main office in Jerusalem which is assisted by three district offices in Ramallah, Hebron and Nablus.

A district education office in the occupied territories is usually composed of the following administrative and technical staff:

Director of the Office Deputy Director

Administrative staff

Custodian
Head of teaching aids department
Head of records department
Head of examination department
Head of finance department
Head of premises department
Secretaries, clerks, telephone operator and a driver

Technical staff: Inspector for

Arab language
English language
Mathematics
Science
Social sciences
Physical education
Islamic education
Arts and home economics

All directors of district education offices are under the control of the Israeli occupation authorities' education officer who is stationed in the main education office.

B. Project justification

1. Problems and expected end of the project

There is a need to develop the analytical and managerial capabilities of the directors of the education district offices in addition to the senior administrative staff and inspectors of the various subject-matter taught in schools. There is a need to develop and improve performance in administration and financial management of programmes and institutions in addition to the design and implementation of educational development projects. Such an effort to improve management performance, skills and functions require information. There is now a serious lack of sound information in all aspects of the educational system. The foundation of information needed is a sound statistical data concerning all educational activities. Thus there is a need to develop the statistical services and management information system.

As expected at the end of this project the managerial and administrative competence of the staff will be improved which will be reflected in the general improvement of the quality of education offered for children in the occupied territories.

C. Development objective

A higher general quality of the education system will be achieved through the improvement of the performance of the administrators and managers of the education system.

D. Immediate objectives, outputs and activities

1. Immediate objective

Provision of training opportunities both inside and abroad for the administrative and technical staff (inspectors) of the district education offices. Another objective is to improve the facilities and equipment that are necessary for efficient management of the education system.

1.1. Output 1

A number of administrative and technical staff would be trained in the country and abroad.

1.1.1. Activity 1

Organizing workshops for the training of senior administrators: four senior administrators from each of the seven districts participate in a one-week training workshop. The workshop will be repeated for two consecutive years.

1.1.2. Activity 2

Organizing workshops in four major subject-areas - Arabic and religion, English, science and mathematics - and social studies for the 55 inspectors. Each of the four workshops will last for one week and will be repeated for two consecutive years.

1.1.3. Activity 3

Seven education officers would be sent abroad for a two-month study tour.

1.1.4. Activity 4

Seven senior inspectors would be sent abroad for a study tour for two months each.

1.1.5. Activity 5

Basic equipment will be provided for each district office including computers — two for each district office — typewriters and photocopy machines.

E. <u>Inputs</u>

The financing aid agency provides the following inputs:

- 1. Funds for the organization of two administration workshops (each workshop for a duration of one week to be attended by 28 administrators).
- 2. Funds for the organization of four workshops for inspectors (each to be attended by about 12 inspectors). Follow-up activities to these workshops will be organized in subsequent years and will involve the same inspectors.
- 3. Funds for a study tour of seven education officers for a period of two months each.
- 4. Funds for a study tour of seven senior inspectors for a period of two months each.
- 5. Fourteen PC computers, plus the necessary number of typewriters and photocopy machines.

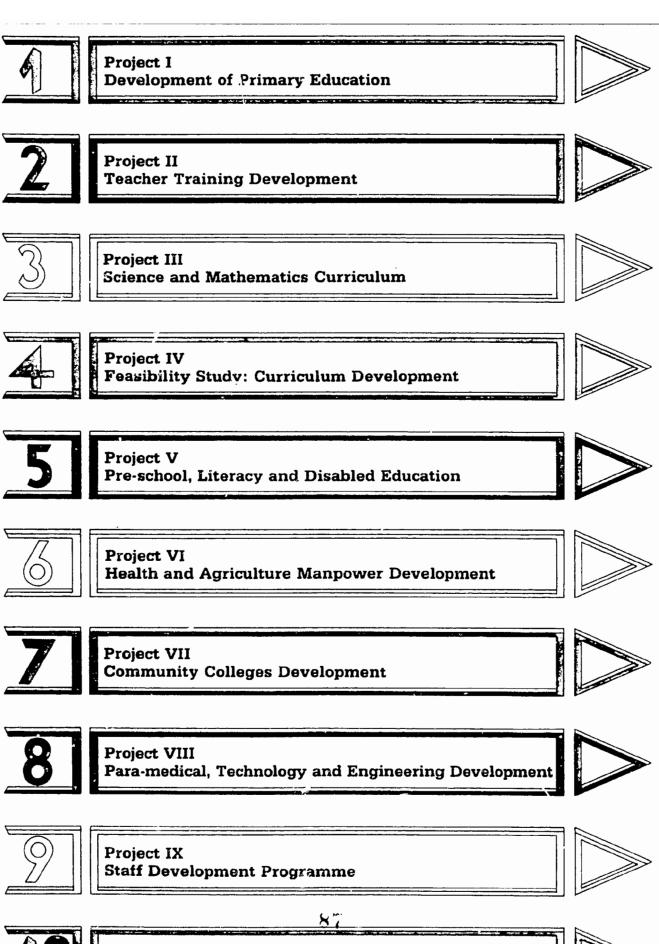
F. <u>Budget</u>

Project X

1	!	Total	!		1991	!	1992 !
	! <u>m/m</u>	US\$!!	m/m	US\$! <u>m/m</u>	US\$!
	!		ļ			!	!
! 10. Project personnel	!		ļ			!	!
! 11.51. Short consultancies	! 4	28,000	i	2	14,000	! 2	14,000 !
! 30. Training	!		!			i	!
! 32. Study tours (Officers)	! 14	53,200	!	7	25,600	! 7	26,600 !
! Study tours (Inspectors)	! 14	53,200	ŀ	7	26,600	! 7	26,600 !
! 33. Training workshops	!	29,400	!		14,700	1	14,700 !
! (Administrators)	!		!			!	!
! Training workshops	!	12,600	!		6,300	!	6,300 !
! (Inspectors)	!		1		·	1	. !
! 40. Equipment	ļ		#-			!	!
! 41. Expendable	!	10,000	!		5,000	!	5,000 !
! 42.Non expendable	i	100,000	i		50,000	1	50,000 !
! 50. Miscellaneous	!		!		•	!	, i
! 52. Reporting	!	3,000	1		-	!	3,000
i 53. Sundries	!	2,000	. !_		1,000	!	1,000 !
! Project X Total	!	291,400	!_		144,200	!	147,200 !

Cost estimates Staff development project

Category		US\$	US\$	%	
I.	Construction	-	_		
II.	Equipment, furniture, materials	110,000	110,000	-	
III.	Technical assistances Consultancies Fellowships Sub-total	28,000 148,000	- - 176,400	- - -	
IV.	Miscellaneous	5,000	5,000	-	
	Total		291,400	-	





Project X
Improvement of Management and Planning

